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A qualitative study of the barriers to incident reporting at the Christie NHS Foundation Trust.

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A QUALITATIVE STUDY OF THE BARRIERS TO INCIDENT REPORTING AT THE CHRISTIE NHS FOUNDATION TRUST

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Abstract

This research is a qualitative study of barriers to incident reporting at The Christie NHS Foundation Trust (The Christie). The conceptual framework was based on models such as the cultural web and Senge (fifth discipline). The E-V-R congruence model formed the basis of the framework and includes identified barriers to incident reporting from the literature review. The following barriers were identified from the literature: a lack of clarity about what to report, lack of anonymity, no feedback, a culture of blame and fear.

The research methodology employed a number of different research methods to achieve triangulation and to ensure the reliability and validity of the research. Methodologies included the use of self-completion questionnaires, semi-structured interviews and secondary data taken from the NHS National Staff Survey, 2008.

Using the conceptual framework a number of barriers to incident reporting were identified at The Christie. These barriers include:

- Staff are too busy to report incidents
- A lack of clarity about what to report
- Staff find it difficult to report senior members of staff
- A lack of feedback

- The form takes too long to complete

It was also established that there is a ‘fair blame’ culture at The Christie, and that there is a lack of learning from incidents.

The following recommendations were made:

- Raise awareness of incident reporting and provide clear guidelines on what constitutes a reportable incident.
- Introduce a feedback mechanism that links the original reporter to an incident.
- Communicate the changes that result from incidents and improve the communication process across the Trust.
- Review the incident report form (IRF) and make it easier to complete.
- Introduce a web based incident reporting system.
- Introduction of a confidential helpline linked to the Governance team
- Develop an incident reporting training package

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Chapter 1

INTRODUCTION

1.1 Background

This dissertation is a qualitative study of barriers to incident reporting within the National Health Service (NHS), with particular emphasis on The Christie NHS Foundation Trust. The Christie is the largest single site cancer treatment centre in Europe.

In the author's role of Blood Transfusion Manager at the Christie NHS Foundation Trust, it appeared that a number of clinical incidents did not seem to have been reported. This raised the issue of whether barriers exist which actually prevent people from reporting clinical incidents in the NHS or whether it is just a case of some employees not doing what they know they are supposed to do? This question is of interest to the organisation because either way, NHS managers will have to find ways to overcome this issue.

In order to appreciate the context within which the research is based, the introduction provides an overview of the NHS and the background to The Christie (the organisation under review). It also outlines the research problem, its strategic importance and the aims and objectives of the study.

1.2 Rationale behind the Research

Clinical incident management is an essential component of quality patient care. An *"incident"* is described by National Patient Safety Agency (NPSA, 2004) as;

"Any event which has actually, or could potentially, lead to unintended harm to a person i.e. adverse events (harm caused) and near misses (no harm caused to patients) to one or more persons receiving NHS care" (NPSA, 2004, page 1).

There is a legal requirement to report all adverse events associated with the use of medicinal products and devices to the Medicines and Healthcare Regulatory Agency (MHRA). The MHRA is the government agency which is responsible for ensuring that medicines and medical devices work, and are acceptably safe. However, the Government considers that the NHS incident reporting systems currently provide an incomplete picture of the scale and nature of failures in health care (Department of Health (DH), 2000).

This perspective on incident reporting led the Government to introduce the NPSA; which was responsible for setting up a National Reporting and Learning System (NRLS) to encourage the reporting of all patient safety incidents from NHS organisations in England and Wales in 2004. Whilst this reporting is beneficial for trend analysis, the agency does not verify the level and nature of reported incidents and the statistics may therefore not necessarily be a true reflection of the incidents occurring in an organisation.

The NPSA provides feedback reports (twice yearly) through the NRLS of patient safety incidents that have been reported from NHS organisations of similar size for

comparison. Appendix A shows the types of incidents that are contained in the NRLS report (NRLS, 2008).

A report, issued by the NPSA (2008), compared the number of patient safety incident reports at The Christie with that of other similar sized hospitals in England and Wales, between October 2007 and March 2008.The report identified the following key areas of concern:

1. The Christie was not reporting regularly to the NRLS. Appendix B shows that no reports were submitted to NRLS for December 2007, February and March 2008. However, these reports were submitted in May 2008 and were therefore included in the figures for the actual number of incidents occurring at The Christie between October 2007 and March 2008 (appendix C).
2. The level of incident reporting at The Christie is below that expected for a trust of its size (figure 1).

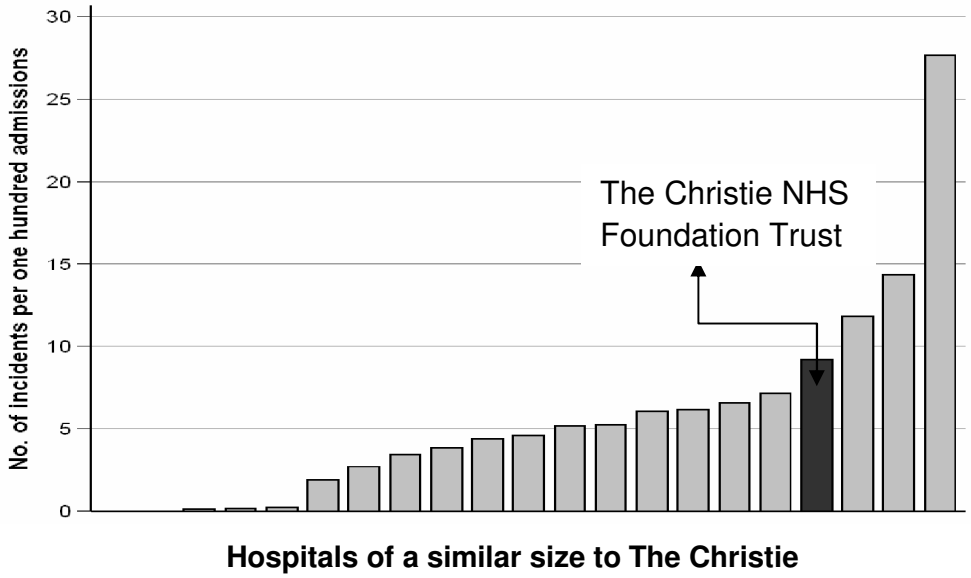


Figure 1: Ranking of hospitals based on the incident reporting rates at The Christie compared to other hospitals (Source: NPSA Report October 2007 to March 2008)

The NPSA report (2008) calculated the minimum expected level of incident reporting which should occur at The Christie. This was calculated by assessing the admission data (appendix C) and the total number of patient safety incidents reported between October 2007 and March 2008 (appendix A).

According to a large scale international case note review, one in ten hospital patients suffer adverse events which result in some harm to the patient (NPSA, 2004). The NPSA findings were supported by other studies (Brennan 1991, Leape 1991, Wilson et al 1999, Davis 2003, Baker et al 2004 and Schioler et al 2001). Figure 2 shows the proportion of patients who experienced adverse events during hospital admission in an international study conducted in 2004 by the NPSA. Variations in the findings may be due to the fact that various definitions of adverse events exist across the world. Other large scale studies conducted in the United States and Australia revealed that 3-17% of all hospitalisations resulted in medical error (cited in Inoue and Koizumi, 2004).

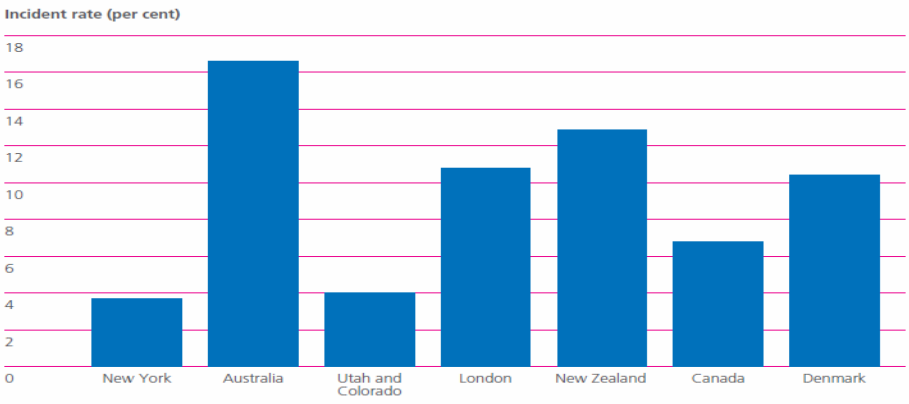


Figure 2: Proportion of patients who experience adverse events from seven studies (Source: NPSA, 2004)

Based on the NPSA figures (2004), the level of incident reporting at The Christie should equate to 10% of the total number of admissions. However, the level of reporting in March 2008 at The Christie was 8% which could be as a consequence of 'underreporting' (figure 1). Other factors which may have contributed to the lower than expected levels of incident reporting include:

- Data from The Christie may be missing from the NRLS database, so figures may not be accurate for The Christie NHS Foundation Trust.
- The lack of incidents reported may be due to the nebulous nature of local policies. If polices are not explicit about what constitutes a reportable incident, then staff following these policies may have uncertainty which could result in incidents not being reported. Also if policies are not shared with 'frontline' staff or access is restricted then this could also prevent incident reporting.
- Finally it could be that The Christie has already made greater improvements in patient safety compared to other hospitals, and therefore reporting rates are lower than that expected by the NPSA.

In March 2008, the NHS Confederation briefing paper outlined that Trusts which reported high levels of patient safety incidents suggested a strong organisational culture of safety because they had taken all incidents seriously and link reporting with learning (NPSA, 2008). A key role for clinical managers is to ensure that incidents are reported, lessons are learned and findings disseminated to improve patient care.

The reporting system is reliant on individuals within hospitals submitting reports when incidents occur and then incidents being reported by the Trust to external agents. Individuals within organisations may have barriers to incident reporting and therefore measurements by the government's agencies would not be accurate. The literature considers that there are considerable barriers to staff participation in incident reporting and significant levels of 'under-reporting' in the NHS (Barach and Small 2000, Coles, 2005).

Understanding incident reporting behaviour of NHS clinical staff may improve risk management, and could create an open reporting and learning culture. This could in turn reduce the risk of harm to patients as learning from mistakes is important in maintaining and improving the quality of care in the NHS (Lawton and Parker, 2002).

Risk Management is about the culture, processes and structures that are directed towards realising potential opportunities whilst managing adverse incidents (Governance in the New NHS, Health Service Circular 1999/123). For an overview of The Christie's Risk Management internal reporting structure see appendix D.

1.3 The Strategic Importance of the Research Question

Identifying barriers to incident reporting would allow managers to address issues and become fully aware of the risks the organisation faces. Lessons could be learnt therefore preventing serious harm to patients. This is strategically important for the following reasons:

- *Risk to The Christie's reputation*- Reputation is the strategic standing of the organisation in the eyes of its customers and other stakeholders (Lynch, 2006). Reputation is the biggest risk to a company's market value (Forstmoser, 2006). The Christie's reputation is very strong, and would be damaged if a patient died as a result of an incident. A strong reputation takes a long time to build, but stakeholder confidence can be undermined as a result of a single catastrophic adverse incident.

- *Risk to the strategic development of The Christie*- Strategic intent is the ***"nature and the direction that an organisation takes to attain the long term strategic position"*** (Morden, 2007 page 446). A corporate objective of The Christie is the development of a network of Christie branded cancer services at other hospitals. If Christie's reputation is damaged by adverse incidents, then secondary hospitals may not wish to be associated with The Christie brand and may object to the development of the Christie networked cancer services at their hospital.
- *Risk of Financial Loss*- Finance is an important resource of any organisation. Adverse clinical incidents can result in a loss of revenue as compensation payments are made. Also the cost of NHS litigation insurance may become a significant burden to the Trust if liabilities are not managed. For example if a Trust was unable to maintain a NHSLA level 3 (the highest level) and was accessed as a level 2 it would cost the trust a premium of £250,000 per level (McIlwain, 2006) therefore resulting in a final loss of

£250,000 per year (until the level 3 status was regained). Financial instability would also put the Trust's Foundation status at risk, if the Trust was unable to remain financially viable and make a profit. See appendix E for profit and loss account 2007/08, showing that a 5.3 million pound surplus was made. The financial position of The Christie may not be as strong as it first appeared due to the collapse of the Icelandic banks and the potential loss of £6 million.

One corporate objective of a Foundation Trust is to make a profit. Another corporate objective is the further development of the private work carried out by the Trust. This is important because there is an assumption that patients paying directly for their treatment are more likely to transfer to another hospital if quality of the service does not meet their expectations.

1.4 National Context-The Structure of the NHS

The NHS can be divided into two strands; one area is responsible for developing strategy and the other deals with clinical aspects of care. The latter can be further divided into primary care trusts (PCT), for example GPs. Secondary care, for example, hospitals, is accessed via GP referral (Figure 3). Tertiary care hospitals take referrals from secondary care hospitals and have specialised doctors dealing with rare conditions. The Christie is an example of tertiary care.

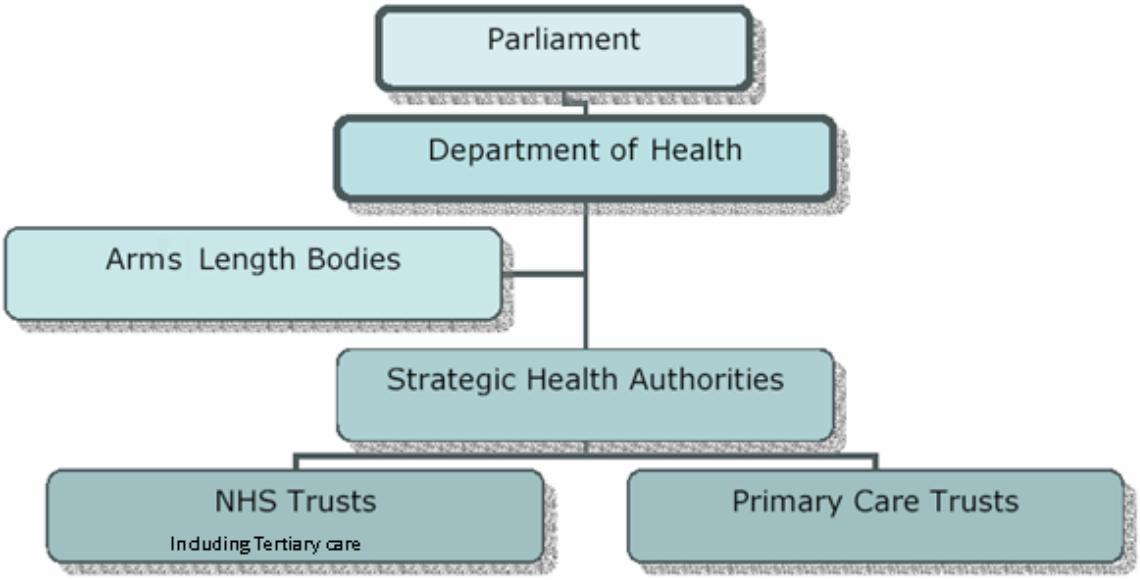


Figure 3: The Structure of the NHS in England (source: DH, 2008)

1.5 The Christie NHS Foundation Trust

The Christie is an international leader in cancer research and development. It is the lead cancer centre for a network of services serving 3.2 million people across Greater Manchester and Cheshire and has a strong reputation across the UK. Within the local health economy are 11 PCTs, the commissioning arm of the NHS, and 15 secondary trusts. The local health economy is part of the North West Strategic Health Authority which serves the health needs of 6.7 million people.

Demand for tertiary cancer centre services is increasing nationally, particularly in Greater Manchester and the North West. Based on the estimated number of new cancer patients each year, The Christie's potential market is currently 77% of all

new patients within the Greater Manchester and Cheshire cancer network, 43% of all new patients across the North West, and 5% of new patients nationally. The projected rise in demand is an opportunity for The Christie NHS Foundation Trust, as the major provider of tertiary cancer services in the North West, to increase its market share. The Christie became a Foundation Trust in April 2007 and now has the freedom to capitalise on market opportunities.

The North West has three tertiary cancer centres: Clatterbridge Oncology Centre on the Wirral, the Rosemere Centre in Preston and The Christie NHS Foundation Trust. There is clearly competition in this field. To a lesser extent there is also competition from secondary hospitals that have their own oncology department. Therefore the quality of care provided at The Christie is crucial if it is to remain profitable.

1.6 Research Aims and Objective

The primary aim of the study is to identify if there are barriers to incident reporting at The Christie NHS Foundation Trust. The study will also focus to a lesser extent on associated areas such as the culture of organisational learning in relation to incident reporting.

There are three objectives of this research study:

1. To identify the general issues which influence clinical incident reporting in the NHS, through a literature review.

2. To identify barriers to incident reporting at The Christie and assess the culture of learning from incidents.
3. To assess the range of strategic/operational choices available to reduce identified barriers to incident reporting, to examine the factors affecting implementation of strategic/operational choice, draw conclusions and make recommendations.

Chapter 2

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

2.1 Introduction

As outlined in Chapter one, this study focuses on the barriers to incident reporting in the NHS with specific reference to The Christie NHS Foundation Trust. To analyse this topic a number of models were considered to develop a conceptual framework. The models reviewed were predominantly developed from research in the areas of strategic management and organisational learning. The models were selected because of their potential to capture the multi-factorial issues which exist in the NHS and to address the dissertation objectives listed in Chapter 1.

2.2 Models assessing the external factors of incident reporting

EVR congruence model

The first model to be considered to identify the contextual factors which impact on barriers to incident reporting was E-V-R (environment-values-resources) congruence. This model provides an ideal framework for examining what managers must achieve strategically in order to create and sustain organisational effectiveness and success. E-V-R shows how the environment is a source of opportunities and threats - external key success factors; and that resources constitute strengths and weaknesses, strategic competencies which either match, or fail to match, environmental needs (figure 4) (Thompson, 2001).If an

organisation focuses on the internal environment only, this can result in strategic drift (Johnson and Scholes , 2006).

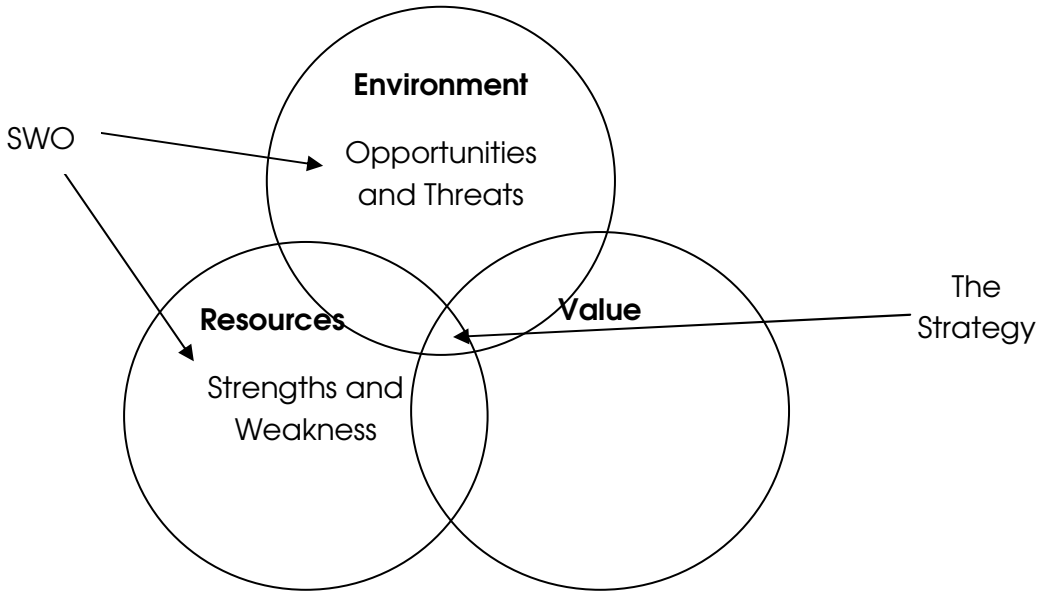


Figure 4: E-V-R congruence model (Source: Thompson, 2001)

The E-V-R congruence model enables managers to bring together the issues from the external environment and match them with the internal resources and values. The greater the congruence the greater the likelihood that the organisation is managing resources to match key success factors dictated by the environment (Thompson, 2001). However, the application of EVR is time consuming. Another limitation of this model is the failure to recognise the impact of leadership in preventing strategic drift (Author, 2009).

STEEPLE Analysis

The business environment of an organisation consists of all the external influences that affect its decisions and performance (Grant, 2008). STEEPLE analysis

identifies seven driving forces for change (Socio-cultural, Technological, Economical, Environmental, Political, Legal and Ethical) which give a macro analysis of the organisation and can be applied to any organisation (Morden, 2007). This framework can be used to identify future trends in the aforementioned areas.

The STEEPLE model can be applied to The Christie and provides the key drivers for changes in incident reporting, and this is an important model when considering the development of an adverse incident reporting policy.

STEEPLE analysis allows a large number of variables to be organised, however, given the large number of external influences it is not possible to analyse them all. The limitation of the framework is that it can result in information overload and it may not be cost effective to collect. The framework does not help managers differentiate vital information from others and therefore does not help managers reach strategic decisions. The model assumes that external forces will fit neatly into these 'boxes' and takes little account of issues which cross boundaries, external drivers may be a cause of confusion.

SWOT Analysis

SWOT is an abbreviation for Strength, Weakness, Opportunities and Threats. A SWOT analysis summarises the key issues from the business environment and the strategic capability of an organisation which impact on the strategic development (Johnson and Scholes, 2006). This model is useful as a basis through which to

generate strategic options (Johnson and Scholes, 2006). A criticism of this model is that it is not absolute and requires comparison of an organisation with competitors.

The previous three models are relevant to the research questions, because they can all be applied to the NHS without any difficulty; therefore are integrated to form the basis of the conceptual framework.

2.3 Major issues associated with incident reporting and barriers to incident reporting

Studies from across the world have shown that clinical mistakes are a major threat to patient care (World Health Organisation, 2004). In NHS hospitals adverse events occur in approximately one in ten patients admitted, resulting in a payout of around £400 million a year in settlement of clinical negligence claims (DH, 2000). However, according to a large scale study by Bolsin et al (2007) the annual cost of adverse events in healthcare is "approximately £9 billion in the USA, £8 billion in Australia and £6 billion in the UK". According to the NPSA up to a half of these incidents could have been prevented (NPSA, 2003).

Research suggests that these figures give no indication of the potential true scale of the problem because of the underreporting of clinical incidents (Firth-Cozens et al, 2004, O'Dowd, 2006).This confirms the findings of a number of other authors (Rennie et al 2002; Firth- Cozens, 2002, Goldie et al, 2003).

In figure 5 the iceberg represents the total numbers of incidents which occur in the NHS. Errors may be intercepted before they affect the patient. Errors that do reach

the patient may be unnoticed. Some errors that are noticed may not be reported where the patient has not come to any harm. In cases where a patient has experienced an untoward event as a result of an error the incident is more likely to be reported (DH, 2004).

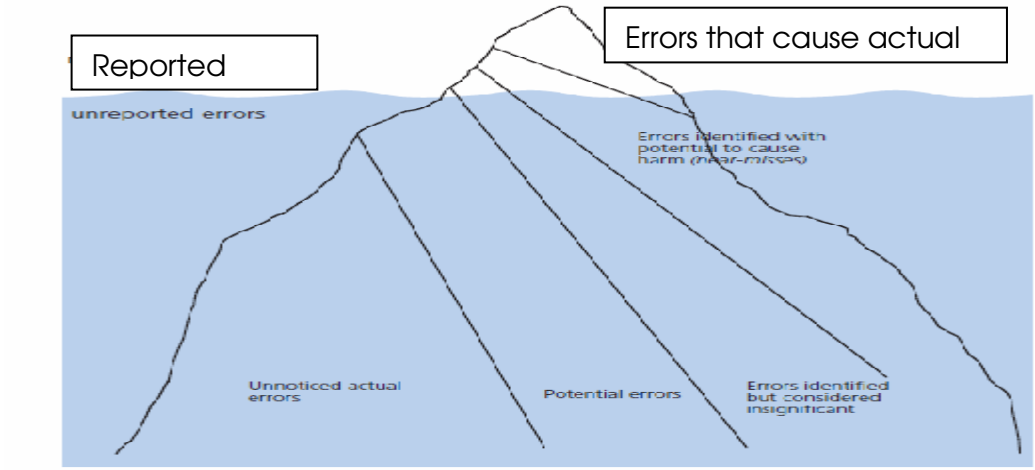


Figure 5: Incident reporting iceberg (taken from DH, 2004)

In figure 5 the number of unreported errors outweighs the actual number of errors reported. Understanding why incidents occur is important and could reduce the 800 patient deaths which occur as a result of avoidable clinical incidents each year (NPSA, 2005).

2.4 Aetiology of Incidents

Incidents are the result of unplanned deviations in system operation, (Koorneef and Hale 1997). These deviations initiate an undesired process which, if not stopped, can result in an incident (Hendrick 1987). Understanding why incidents occur is now being appreciated in many health systems across the world (DH, 2001). Research shows that organisations with a high level of reported incidents (above

10%) have developed a strong reporting culture (Weick and Sutcliffe 2001).This is an important point for consideration as human decisions and actions play a fundamental role in nearly all incidents(DH,2000).

Reason (2005) defined human error as ***"The failure of planned actions to achieve their desired goal"*** (Reason, 2005, page 57). Reason's model of organisational accident causation was originally developed for use in complex industrial systems, as a means of understanding the relationships between the various factors involved in the genesis of accidents and to identify methods of accident prevention (Figure 6).

In Reason's (2005) explanation of this model, he identifies several concepts that are needed to understand the aetiology of organisational accidents. These include the following:

- Organisational issues
- Workplace factors
- Person
- Breached defences

Figure 6 recognises that organisational processes have a direct bearing on how accidents develop in organisations. Decisions taken at the highest level (Trust Board) of an organisation - whilst well thought out can be incorrect and therefore create the potential for latent problems within the organisation. Latent failures create weaknesses which increases the probability of unsafe acts occurring. If control systems are ineffective the outcome is an incident.

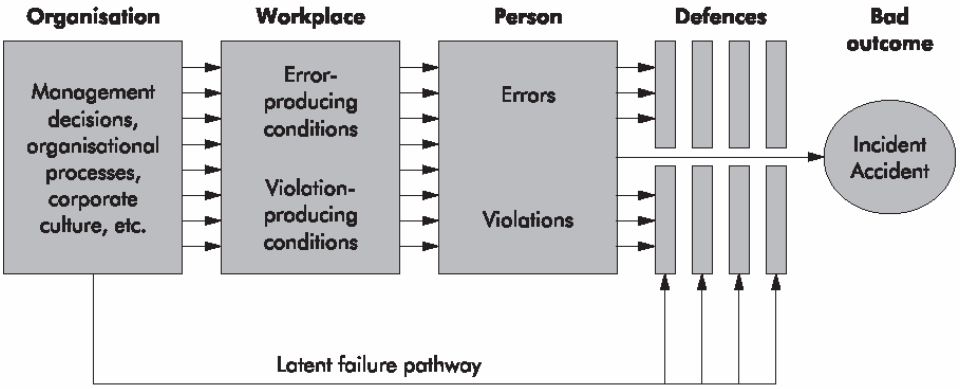
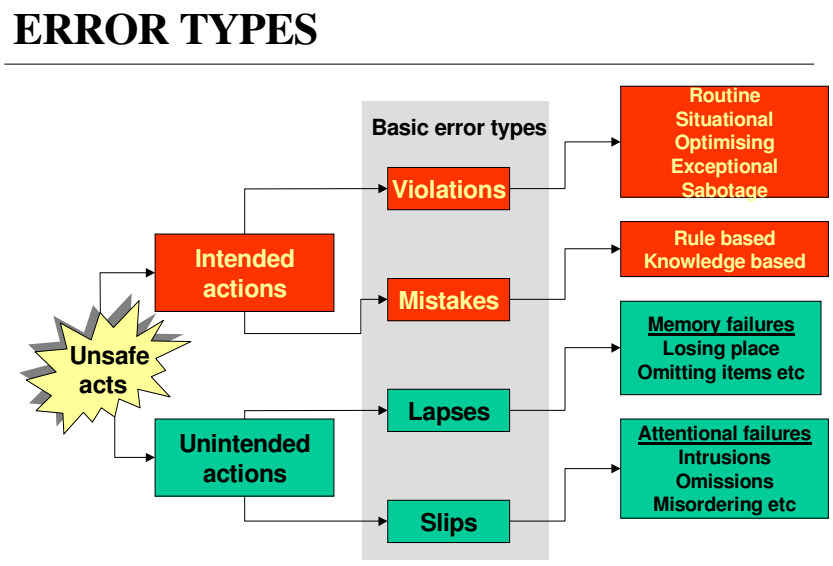


Figure 6: Accident causation model (Source: Reason, 2005)

As well as latent failures there are also 'active failures'. These are unsafe acts committed by those at the 'sharp end' of the system and whose actions can have immediate adverse consequences (NPSA, 2004).Reason defines two main types of 'Unsafe Act': errors and violations (figure 7).

Figure 7: Error Types (Source: Reason, 1995)



Errors can be due to skill-based attention slips and memory lapses. These involve the unintended deviation of actions from what may have been a perfectly good plan

(Reason, 1995). Errors caused by distraction and interruption are difficult to eliminate completely; therefore these are difficult to control.

It is impossible to eliminate all risks (Richardson, 2002) especially human error. Errors can never be eliminated by any amount of training, knowledge or motivation, although these can make error far less likely. Adverse events are rarely the result of a single error or factor (Gault, 2003) as shown in figure 7.

The accident causation model has been adapted and applied to healthcare setting (Vincent et al 1999), taking into account some of the specific characteristics of healthcare systems (such as patients, working conditions and equipment) (Vincent et al (1999), Stanhope (1997)).In the NHS, adverse incidents are often the result of a series of errors or omissions leading up to the critical incident itself (DH, 2004) as depicted by the 'Swiss cheese model' (Reason, 1997 cited in DH 2000).

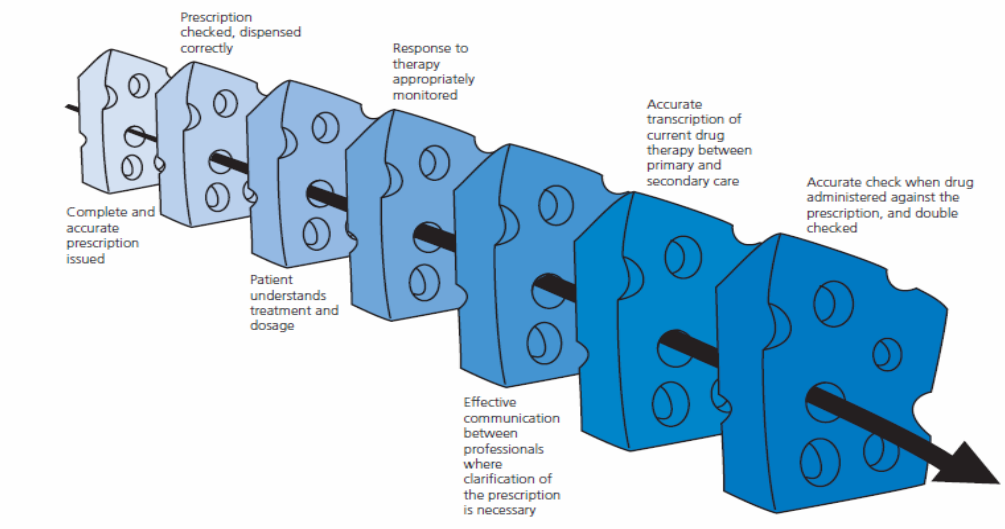


Figure 8: The 'Swiss Cheese' model (Source: Reason 1997 cited in DH, 2000)

errors (Schwartz and Brodowy, 1995). Each slice of cheese represents a barrier

against error. Ideally all the defences should be intact, but in reality the layers have many holes. An error may get through holes in one or more layers of defence but be stopped at another stage in the process. The more layers of defence there are, the lower the likelihood of holes in those defences opening up, the lower the risk of an error occurring. Holes in the defences open up as a result of active failures and latent conditions as discussed earlier.

The model is of value to the NHS as both the NHS and other high risk organisations (aviation, nuclear and petrochemical) rely on the interaction of humans and equipment to operate efficiently. Healthcare can learn much from aviation (Leape, 1994, DH, 2000, Helmreich, 2002).Human error remains a significant causal factor in the majority of aviation incidents (Thomas, 2004). To reduce incidents in the NHS, there has been the development of Clinical Risk Management (CRM) over the last thirteen years.

2.5 Clinical Risk Management

Risk is defined as “the possibility of incurring misfortune or loss” (Collins Dictionary). In the NHS, risk management is mainly concerned with harnessing information which can reduce loss of life, financial loss and loss of reputation. This information can be gained from the reporting of clinical incidents; however, under-reporting of incidents prevents the gathering of vital information and puts patients’ lives at risk.

Risk management in the NHS is an evolving process that has little empirical work to inform its progress (Dickson et al, 2004); a review of the literature has

highlighted a limited theoretical base. There is a lack of a scientific foundation for the design of risk management training programmes (Thomas, 2004). Nonetheless, error management supported by incident reporting can provide a useful framework within which the NHS can focus efforts to enhance patient safety.

The use of a risk matrix (NPSA, 2008) (figure 9) when coupled with a risk register (a list of organisational risks) is valuable as it aids when planning a risk strategy. However, the use of this tool is dependent on adequate and reliable data from incident reports.

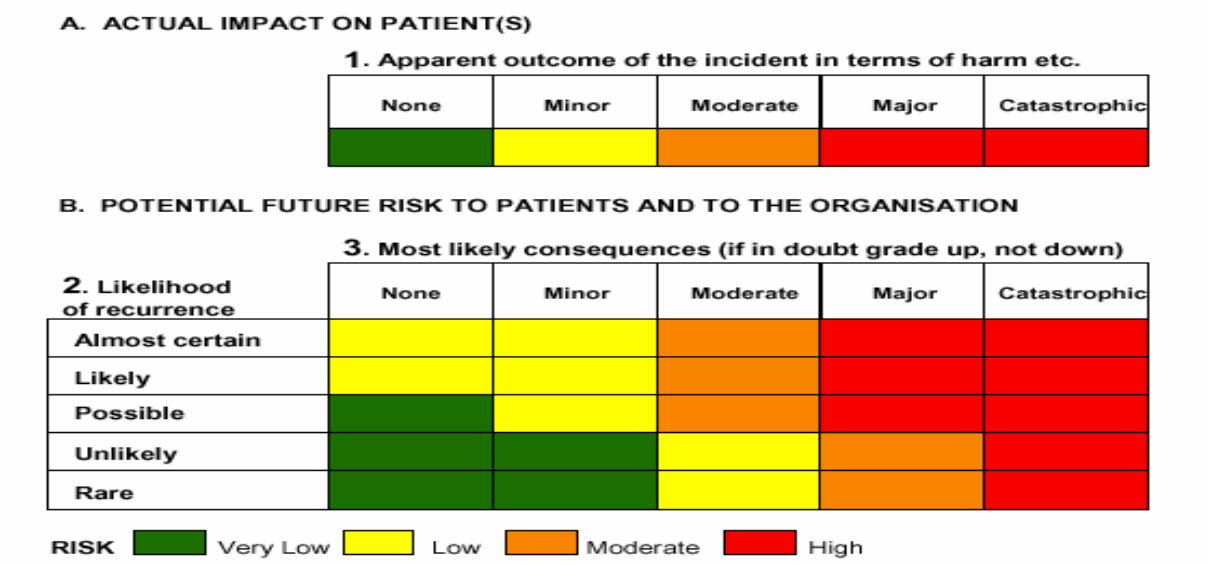


Figure 9: Risk matrix (Source: NPSA, 2008)

2.6 Incident Reporting

According to DH (2000) the NHS positions on incident reporting are as follows: avoidable failures occur, untoward events recur and incidents which result in lapses in standards of care in one or more health organisations. These do not reliably lead to corrections throughout the NHS. Models to improve incident reporting have been originally developed outside of the NHS.

The Heinrich pyramid was developed based on work in aviation and has shaped the current work in incident reporting (Connolly, 2006) Figure 10. Heinrich estimated a ratio in industry of one major injury and 29 minor injuries to 300 no-injury accidents. To some extent the health of a reporting system can be judged by the proportion of minor incidents to more serious reported incidents and accidents: the greater the proportion of minor incidents reported, the better the reporting system is working.

Figure 10: Heinrich pyramid (Source: DH, 2000)

Incident reporting has been identified as a key factor in establishing an effective risk management culture (Darren, 2006) and is a key aspect of NHS clinical governance (DH, 2000). Most hospitals in the US and UK are currently introducing risk management activities, for example, the reporting of near misses (Wollersheim, 2007).

According to Cook (2000), no research has proved the effectiveness of near miss reporting in patient care. However, experience in other sectors demonstrates the value of 'near miss' reporting the NHS does not compare well with best practice in other areas (DH, 2000).

Reporting systems are vital for providing information on which to base trend analysis and recommendations. At The Christie a paper report system is used (Appendix I) which is then put into a computer system by a member of the risk team. The form takes a long time to complete; sometimes incomplete forms are submitted. There is often a time-lag between incidents being reported and further discussion about them. Also such reporting systems are dependent on the willingness of staff to complete them. Incident reporting is used predominantly by nurses (Johnson, 2003, Kingston et al, 2004). The introduction of an online reporting system at St Mary's NHS Trust in London resulted in an increase in reporting from medical staff, because it gives guidance on completing the form (Anderson, 2007).Similar findings were reported in a Japanese hospital (Nakajima, 2005).

2.7 Underreporting of Incidents

Underreporting is an organisational wide issue in the NHS and is a barrier to improving patient safety (Firth-Cozens, 1997, O'Dowd, 2006).This underreporting is not only a problem for the UK; Barach and Small (2000) reported that "underreporting of adverse events in the USA is 50-96% annually". In the UK a million healthcare incidents were reported in 2006, but it was estimated that 22% of incidents and 39% of near misses were unreported (O'Dowd, 2006). Although some professional groups are governed by codes of practice, underreporting is considered the norm in the NHS (Attree, 2007). This is because an atmosphere that supports the reporting of errors has not been developed in the NHS (Ajeneye,

2008). In fact, reporting adverse events should be thought of as a standard duty of care (Bolsin, 2007).

Nursing and Midwifery Council's (2002) professional code specifies the need to raise concerns in particular incident reporting. In medicine similar responsibilities are outlined by the General Medical Council (2001). Pharmacy staff for example, have clear directions with respect to incident reporting in the codes of ethics for pharmacists and pharmacy technicians (Pharmaceutical Journal, 2005). The Health Professions Council, (2008) provides guidance to the professions allied to medicine; however, there is no mention of incident reporting in their standards. This allows the development of local standards on this issue and therefore reduces clarity on incident reporting.

2.8 Barriers to Incident Reporting

A review of the literature provided a comprehensive overview of the diverse factors identified in research affecting willingness of hospital staff to report incidents. However, most of the literature refers specifically to nurses and doctors; there is a lack of literature relating to allied health professions such as Radiology, Pathology and Pharmacy staff. Also although, there is a large body of literature on medication errors, very little is related to the barriers associated with incident reporting. See table 1 for a summary of empirical research on barriers to incident reporting 2000-2006 and a critique (Author, 2009).

There is some controversy around the role of incident reporting and its potential to improve patient safety. According to Leape, (2002) “no controlled studies have been conducted to test whether improved incident reporting leads to a decrease in errors” (page 1633). There is a growing body of literature that confirms the value of incident reporting in reducing the frequency of clinical events (Leape, 2002, Wolff, 2001). Reporting incidents in the NHS and other healthcare settings a constructive and non-punitive environment will bring about fewer incidents and reduce related cost (Bolsin et al, 2007; Clinton, 2006).

One of the first studies to look at barriers to incident reporting (Barach and Small, 2000) concluded that “few barriers to near miss data collection exist” (page760). They suggest that there was a lack of clarity about what constitutes a reportable incident and that this was a major barrier to incident reporting. This was a non-medical study (carried out in the aviation, petrochemical and nuclear power industries); the findings were extrapolated (by Barach and Small, 2000) and applied to the NHS. The context of the study means the findings are not directly applicable to the NHS, for example, legal immunity is given to reporters of incidents in these industries which could potentially reduce barriers to reporting, and this does not occur in the NHS. See table 1 for an overview of further studies (Author, 2009).

Table 1: Summary of empirical research on barriers to incident reporting 2000-2006 (Source: Author, 2009)

Author (Date)	Methodology	Main Findings	Critique
Barach and Small (2000)	Literature search Questionnaire	Lack of understanding of what a near miss is and what should be reported. Fewer barriers identified than in other studies.	The study was based on literature from non-medical environments, the finding are valuable however they are not absolutely applicable to the NHS. The author applied the results of the literature to the NHS; however it failed to take account of the different cultures which exist in different organizations and impact on incident reporting. Legal immunity is given to reporters of incidents therefore producing fewer barriers.
Lawton and Parker (2002)	Literature search Questionnaire	A culture of fear in the medical profession discourages incident reporting Doctors were unwilling to report a colleague as its seen as 'whistle blowing'	The study was important in identifying the differences in reporting between the doctors and nurses, however, it takes no account of other professional groups within the NHS. The study relies on self-reporting and there are limitations with this approach as respondents may be tempted to select the socially desirable response. Results are therefore hypothetical and of limited value.
Firth-Cozens (2003)	Questionnaire	Fear of retribution	The study refers to incident reporting in the same way as whistle- blowing, however, the term whistle- blowing has a negative connotation and may be responsible for the low response rate reported. The low response rate, although it does not invalidate the findings it makes it more difficult to confirm conclusions.
Jeffe et al (2004)	Literature search Interviews in a focus group Qualitative	Not knowing what to report Not knowing how to report Fear of repercussions and lack of confidentiality Time and reporting efficiency Lack of feedback are all barriers to reporting	This is a balanced study which covers a wider cross-section of the medical profession. However, it does not look at the professions which support medicine such as pathology, radiology and pharmacy. The nursing profession is overrepresented and the qualitative nature of the study, suggest that it might not be applicable at other hospitals. Some of the managers may not be clinically based which suggests that some responses are theoretical and not representative of how nurses would react in reality.
Coyle (2005)	Questionnaire	Lack of time was found to be the major barrier to incident reporting, the extra work and concern about career and personal reputation and the excess paper work involved in reporting	This study reflects the views of staff from ambulatory care, and therefore may not be totally applicable to the hospital setting. However it confirms the findings of Jeffe et al (2004).

Table 1: Continued

Author (Date)	Methodology	Main Findings	Critique
Evans (2006)	Questionnaire	Lack of feedback, the incident form taking too long to complete and the belief that an incident was too trivial to report. The study also showed that near misses and forgetting to report incidents because staff were too busy were important factors in not reporting incidents. A quarter of respondents did not know how to access an incident form or what to do with them.	This study adds value to the subject because it confirms previous findings and adds a new dimension, by identifying organisational barriers to incident reporting. The Organisational factors relating to structure and process such as inadequate feedback, long forms and insufficient time to report were found to be barriers to incident reporting. This study pinpoints specific areas which managers can focus on and change to improve the process of reporting. Again this study only focuses on doctors and nurses, however it did confirm that doctors have the greatest barrier to incident reporting, thus giving managers a more focused approach to this subject (as this was also found by (Lawton,2002 and Uribe, 2002).
Schectman (2006)	Questionnaire	Low proportions of doctors reported incidents for fear of being blamed.	Other barriers include reason already stated above, additional reason included fear of legal ramifications. This study was carried out in the USA therefore legal issues may not be as significant in the NHS as doctors would be covered by NHSLA and are unlikely to suffer personal financial loss. The study included junior doctors yet made no allowance for variables such as experience or training some doctors only had one year's experience. In this study 49% of doctors were not familiar with the reporting process. This study should have prompted a follow-up study of in-depth interview to ascertain the reasons why such a low result was found. Professional cultural issues could be a cause of non-reporting.

Several categories of barriers to incident reporting have emerged from the literature analysis:

- Cultural barriers to incident reporting

- Organisational barriers to incident reporting
- Barriers to incident reporting as a result of fear
- Barriers to organisational learning from incidents

2.9 Cultural Barriers to Incident Reporting

Organisational culture is central to incident reporting, from ensuring that incidents are identified and reported through to embedding corrective action into practice (DH, 2000). A lack of trust in the organisational culture can also be a strong disincentive to reporting incidents (Westrum, 1992). A number of studies all carried out in a healthcare environment have found that a culture of silence is the norm within the NHS (Firth-Cozens, 2004; Warburton, 2005, Kaldjian, 2006). Conversely, Evans (2006) and Uribe (2002) did not find that cultural issues such as fear to be a major reporting obstacle.

Another cultural issue identified in NHS studies was the 'culture of blame'. It was found to be a noteworthy barrier to incident reporting (Waring, 2005). This finding was supported by the principal findings of another qualitative study carried out in an NHS hospital (Wilson, 2007). This particular research went further by concluding that the culture of medicine itself was a significant barrier to reporting (Wilson, 2007). This is because when things go wrong, the response of managers has often been an attempt to identify an individual who must carry the blame (DH, 2000). Raising concerns is therefore perceived by some individuals as a high-risk, low- benefit act (Attree, 2007). The DH acknowledged in a policy document *(An organisation with a memory, 2000)* "that the blame culture of the NHS had

contributed to the lack of understanding of medical errors" (DH, 2000). There is a movement in the NHS toward considering errors from a perspective of root cause analysis (Parker and Lawton, 2003) instead of blame. Also the NPSA has been trying to introduce an open and fair culture in hospitals (Parker and Lawton, 2003) to improve the level of incident reporting.

Another large study carried by Lawton and Parker (2002), found a culture of fear in the medical profession which discourages incident reporting. Doctors were unwilling to report a colleague as it was seen as 'whistle blowing', which was a cultural taboo (Lawton and Parker 2002).

A variety of different studies found low proportions of doctors reported incidents for fear of being blamed (Schectman, 2006) and of being ostracised (Firth-Cozens et al, 2003, Kingston et al, 2004). These findings support earlier work which identified that the medical profession had a 'closed culture' which inhibits openness (DH, 2000, Kennedy, 2001).Only a small percentage of doctors formally report incidents (Evans, 2006),(Cowan, 2004) (Lawton and Parker,2002), (Uribe, 2002).

Recent UK health policy initiatives promote a 'no blame culture' (Ehrich, 2006) in order to encourage incident reporting. However, there is evidence that healthcare staff have been disciplined for speaking about incidents with their peers (Richardson, 2002). According to the Healthcare Commission for England, a culture of blame still stops healthcare professionals from reporting patient safety incidents (Hitchen, 2007). This is a contentious point because individuals must

sometimes be held to account for their actions, if there is evidence of gross negligence or recklessness, or of criminal behaviour (DH, 2000). Some hospitals have adopted a 'fair blame culture', however, this can send out mixed messages if managers do not specify clearly what incidents could lead to disciplinary action. Lawton and Parker (2002) found that reporting is constrained by the specific occupational hierarchies in the NHS. The use of the cultural web model (figure 10), identifies some of the cultural aspects of the organisation which both supports and inhibits incident reporting.

The cultural web model (Johnson and Scholes, 2006) allows analysis of different areas of organisational culture. The concept of the cultural web is a representation of the taken-for-granted assumptions (paradigm) of an organisation and the behavioural manifestations of a culture (Johnson and Scholes, 2006). Figure 10 outlines the elements of the cultural web which need to be considered in order to understand the culture of an organisation:

- The routine and rituals of the web represents "the way we do things around here".
- The stories represent the way members of an organisation tell each other what's important in the organisation.
- Symbols represent the nature of the organisation, the symbol may reveal an underlying assumption about customers (or patients) which might play a significant role in influencing the strategy of an organisation (Johnson and Scholes, 2006).

- Power structures are likely to influence the key assumptions of the organisation; however, there are different sources of power within most organisations.
- The control systems emphasise what is important to monitor in an organisation.
- Organisational structure is likely to reflect power and show important roles and relationships.
- The paradigm of the organisation encapsulates and reinforces the behaviours observed in the other elements of the cultural web.

The model encourages those applying it to identify specific issues within the web; there is an assumption that any area of the web can be changed. It provides a static view of an organisation and offers no forward projection. Analysis is not objective because it can be influenced by any preconceived notions that an individual already hold about the culture of NHS before the model is applied (Author, 2009). Rituals, routine stories and symbols lie at the heart of culture Schein, (2004) and therefore cannot be easily changed. The symbols may be routes to manipulating culture; nonetheless, organisational cultural shifts are difficult to accomplish (Roth, 2004) and can take between 5-10 years.

Another assumption made is that the structure of the web refers to the formal structure of an organisation. However, it does not represent the informal structures present within organisations and any subcultures, it is therefore unitary. This is significant because subcultures allow the NHS to be viewed in a pluralistic manner

(Collins,1998), which means that there is no absolute view, and highlight the point that everyone's views will be different even within the same professional group or department.

The outer sections of the web whilst providing a support and protective system for the paradigms can also create cultural 'lock in' because they create 'barriers' which could effectively deflect external signals which could potentially encourage new ways of improving incident reporting (Author, 2009).

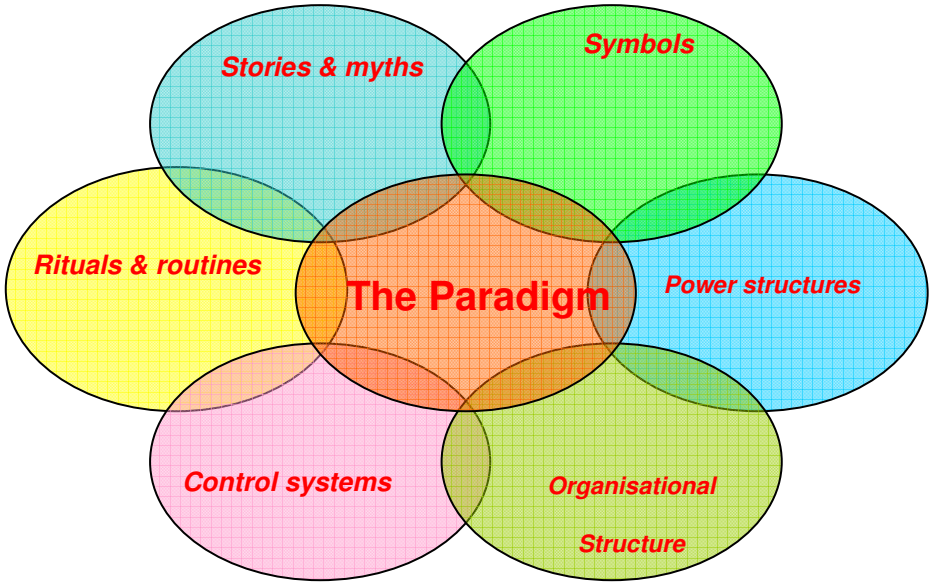


Figure 11: Cultural web (Source: Johnson and Scholes, 2006)

2.10 Organisational Barriers to Incident Reporting

According to Wiegmann and Shappell (2003) (cited in Milligan, 2007: page 100) ***"organisational culture and policies are important variables related to organisational climate".*** Organisational climate embraces a wide range of factors, such as its structure,

communication chains and lines of responsibility. Hospitals are large organisations which consist of many subsections; therefore the hierarchical structure is the most effective way to manage. However, this structure acts as a filter for information which results in loss of information at each level of the structure. Information can become filtered to the extent that frontline and backroom staff are unaware of what to or how to report incidents. Junior managers can become unaware of overarching strategies and so learning only occurs at a local level.

Time-consuming reporting mechanisms in health care have been identified as an important barrier to incident reporting in the UK and Australia (Firth-Cozens 2002, Kingston et al. 2004). Organisational factors relating to structure and process such as inadequate feedback, long forms and insufficient time to report were found to be barriers to incident reporting in the NHS (Evans, 2005 and 2006), (Uribe, 2002), (Coyle, 2005). Evans (2006) in a large cross sectional survey of doctors and nurses (n= 1062) found that a quarter of respondents did not know how to access an incident form or what to do with them once completed. It is interesting that doctors viewed organisational barriers to be more significant in preventing them from reporting incidents than cultural issues, such as fear or blame (Evans, 2006). This study pinpoints specific areas which managers can focus on and change to improve the process of reporting. Indeed, the DH has been trying to influence patient safety at this level, with the inclusion of patient safety as the number one domain in the Health Standards (2004).

2.11 Barriers to Incident Reporting as a result of Fear

Fear has been reported as a barrier to reporting errors in the NHS (Vincent et al, 1999) “Fear of retribution” was also reported by Firth-Cozens (2003). According to another study “low proportions of doctors reported incidents for fear of being blamed” (Schectman, 2006). This study was carried out in the USA where legal ramification may have more impact than they do for NHS doctors. Although NHS doctors are covered by NHSLA and are unlikely to suffer personal financial loss, they are however, at risk of losing their job if unsupported by the GMC.

2.12 Barriers to organisational learning and the learning organisation

Organisational learning defined by Dixon (1994) (cited in Beardwell et al 2004, page 329):

“The intentional use of learning processes at the individual, group and system level to continuously transform the organisation in a direction that is increasingly satisfying to its stakeholders”.

Organisational learning has also been described as a social phenomenon; as individual learning depends on the knowledge which others in the organisation possess (Figueiredo, 2003 cited by Curado, 2006).Organisational learning is therefore a process of individual and collective learning, both internally and externally of the organisation (Prange, 1999). However, Ikehara (1999) suggests that individual learning does not necessarily lead to organisational learning.

There are various models of organisational learning proposed (Argyris, 1995). These include Single-loop learning, which involves reacting to a problem based on pre-set organisational standards (usually documented in policies). According to Argyris and Schon (cited by Brooks, 1999) most organisations are locked into single-loop learning. Double-loop learning is referred to as higher-level learning (Fiol and Lyles, 1985) cited in Lynn (2004). Such learning occurs when the organisation is willing to question long-held assumptions about pre-set standards (Argyris, 1995, Iles & Cranfield, 2004).

The NHS falls short of being a learning organisation because; there is too often a 'blame' culture, no account is taken of near misses and there is little culture of self-appraisal. Figure 12 the learning step was produced by DH (2000) and identifies a number of key steps to learning from incidents. The NHS will have to become a learning organisation in order to achieve these.

Figure 12: Key steps in learning from adverse events (Source: DH, 2000)

Writers such as Senge (2006) and Pedler et al (1997) put forward the concept of the learning organisation. Pedler et al (1997) cited in Beardwell et al, (2004, page 329) defines a learning organisation as ***"an organisation that facilitates the learning of all its members and consciously transforms itself and its context".*** This suggests that it is a vision of what might be possible when organisations go beyond merely training individuals towards developing learning at the whole organisation level (Beardwell et al, 2004).

A learning organisation is one in which people continually expand their capacity to create the results they truly desire and learn how to learn and perform well together (Senge, 2006).He suggests that organisational learning can be analysed using the fifth discipline: systems thinking, personal mastery, mental models, building shared vision and team learning.

Senge's personal mastery looks at the connection between organisational learning and personal learning. There is an assumption that personal learning will lead to organisational learning, but this will not happen if the individual does not share their learning.

Mental models on the other hand are difficult to share and analyse because they are so deep-seated and everyone will have their own views. Building a shared vision is an idealistic view and is rarely found in large organisations. This is dependent on the effectiveness of management in ensuring that policies are disseminated. Team learning will depend on the sharing of knowledge ie feedback mechanisms.

Systems thinking assumes that each of the many departments within the NHS are aware of what's going on in other departments. It also assumes an appropriate level of communication between departments so that managers are informed of the outcome of incidents and any associated learning. The author agrees that there are interrelations between departments, but feel that interaction tends only to occur at times of crisis perhaps learning from near misses does not occur.

Finally this model is oversimplified and static; it makes many assumptions which cannot be applied to all organisations equally. It is prescriptive and offers no feedback mechanisms from which to learn (Nonaka, 1991) cited in Beardwell et al, 2004.

Iles and Sutherland (2001) completed a review of literature on learning organisations and identified five key characteristics that are valuable in terms of how organisations can managed and promote effective learning (table 2). This model is interesting because it includes leadership which is important in setting the vision for the organisation.

Structure	Learning Organisations have flat managerial hierarchies that enhance opportunities for employee involvement in the organisation. These features promote systems thinking, information sharing and openness to information necessary for organisational learning.
Information Systems	Learning Organisations require information beyond that used in traditional organisations where information is generally used for control purposes (single-loop learning). Transformational change requires more sophisticated information systems that facilitate rapid acquisition, processing and sharing of rich, complex information that enables effective knowledge management.
Human Resource practices	People are recognised as the creators and users of organisational learning. Accordingly, human resource management focuses on provision and support of individual learning. Appraisal and reward systems are concerned to measure long-term performance and to promote the acquisition and sharing of new skills and knowledge.
Organisational culture	Learning Organisations have strong cultures that promote openness, creativity and experimentation among members. They encourage members to acquire process and share information, to nurture innovation and provide the freedom to learn from mistakes.
Leadership	Like most interventions aimed at securing significant organisational change, organisational learning depends heavily on effective leadership. Leaders model the openness, risk taking and reflection necessary for learning and communicate a compelling vision of the Learning Organisation, providing empathy, support and personal advocacy needed to lead others towards it.

Table 2: How organisations can promote learning (Source: Iles and Sutherland, 2001)

Learning from incidents is critical to NHS organisations and their staff in delivering a safe and effective service to patients (WHO, 2005). Research on learning from failures in health care is relatively sparse (DH, 2000).However, a recent small scale NHS study concluded that there is potential for organisational learning to result from individual learning (Cooper, 2005). This is interesting because most organisational learning models are focused on the activities of individuals of organisation, which results in “individual action bias” (Huysman, 1999).

2.13 Developing a Conceptual Framework

An important outcome of the literature review is the development of a conceptual model. A conceptual model is a diagram that connects variables /constructs based on theory and logic to display visually the hypotheses that will be tested (Hair, 2007). A number of models have been incorporated into the conceptual framework. Appendix F list the models identified as appropriate for examining the research objectives outlined in chapter one (page10).

There are limitations associated with each of the different models considered in this Chapter. However, the models selected provide the researcher with a clearly defined starting point with which to undertake investigations into the underlying issues related to incident reporting and associated barriers. Figure 14 highlights the areas of investigation that the research will focus on.

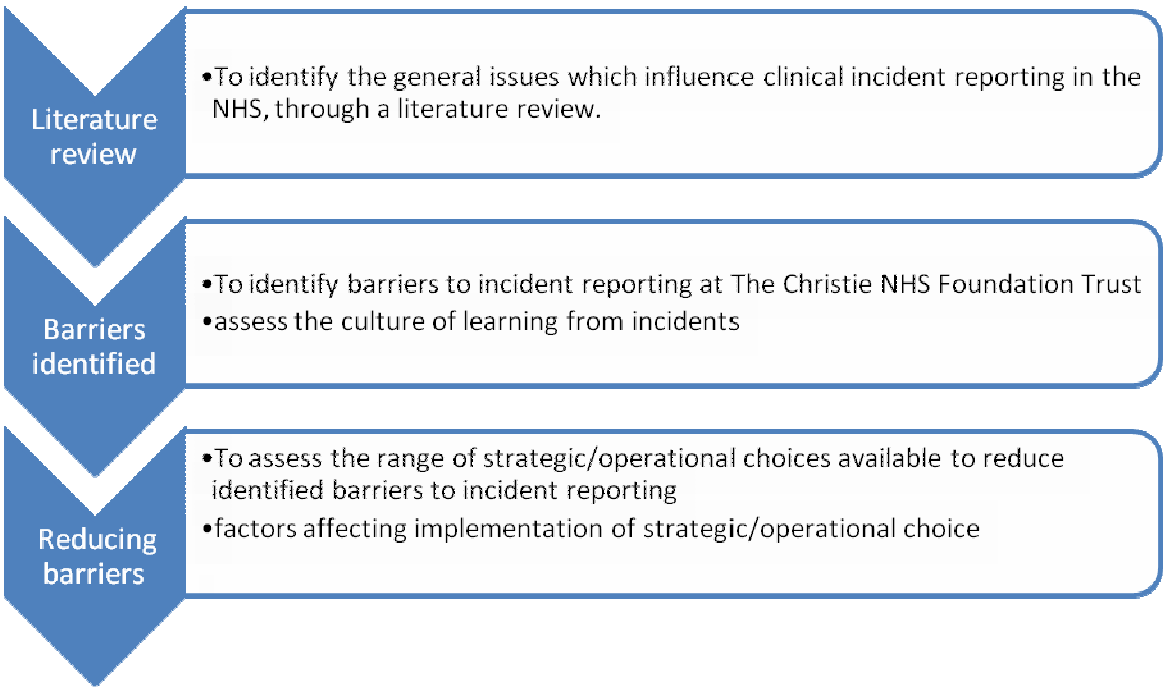


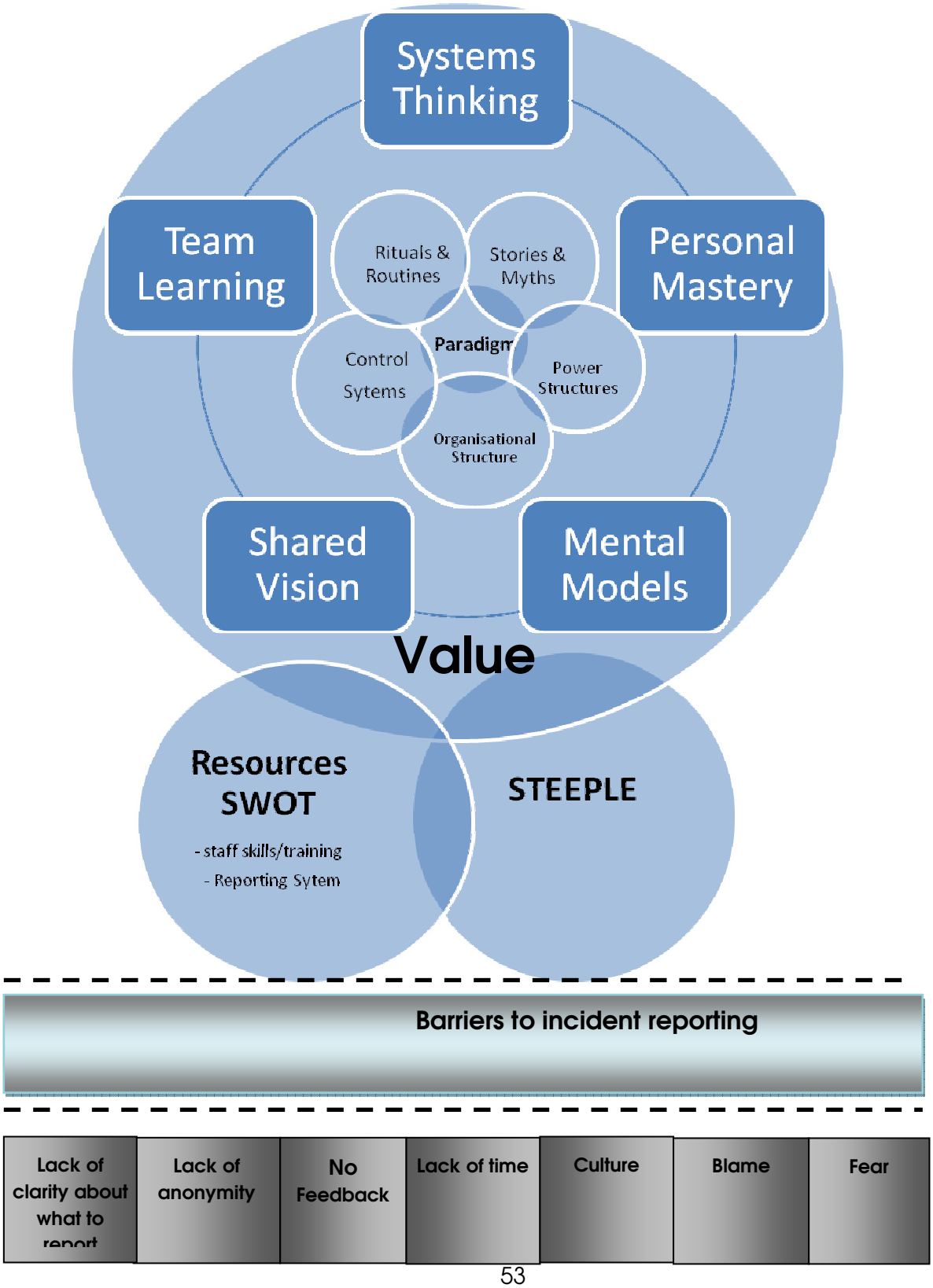
Figure 14: The three principal areas of investigation

The conceptual framework supports the investigation in the following ways:

1. The modification of the E-V-R model (illustrated by the oversize 'Value' section) emphasises the fact that the value of the organisation is the overarching factor in determining any barriers to incident reporting.
2. Embedding the cultural web model in the centre of the value section, helps to highlight the reasons for specific cultural issues such as blame or open cultures which shape the value of an organisation (objective 2).
3. Within the 'Value' section, the elements of Senge's fifth discipline (2006) signify the important issues for learning from incidents (objective 2).
4. The organisation does not operate independently of its external environment therefore the STEEPLE model is embedded into the 'Environment' section of the model. This section will partly answer questions relating to objective one.
5. Barriers identified in the literature (objective 1) will help to focus attention on barriers to incident reporting at The Christie (objective 2).
6. The 'Resource' section of the model includes a SWOT analysis which focuses on human resource systems and incident reporting systems in order to answer objective 3.

Chapter three will consider the different approaches to research and identify the most suitable methods to investigate the barriers to incident reporting against the developed conceptual framework in figure 15.

Figure15: Conceptual Framework for investigating barriers to incident reporting



Chapter 3

RESEARCH METHODOLOGY

3.1 Introduction

The literature review (chapter 2) depicts a range of models which are available to investigate barriers to incident reporting in the NHS leading to a conceptual framework. The application of the conceptual framework within a research setting requires an understanding of research philosophy and methodology, so that the most appropriate methods is applied to the research question in order to provide reliable and credible results. This study was supported by the Risk Manager and the Director of Clinical Governance and therefore did not require a full application to the Clinical Research and Clinical Governance Committee.

3.2 Research Paradigm and Philosophy

The term 'paradigm' describes the progress of scientific discoveries in practice, rather than how they are subsequently reconstructed in books (Easterby-Smith et al, 2004).

There are three major ways of thinking about research philosophy: epistemology, ontology and axiology -see table 3 for a definition of each.

Epistemology	General set of assumptions about the best ways of inquiring into the nature of the world.
Ontology	Assumptions that we make about the nature of reality
Axiology	Studies judgements about value

Table 3: Overview of the major ways of thinking about research philosophy (Source: Saunders and Lewis, 2007)

Understanding philosophical issues is useful for three reasons (Easterby-Smith et al, 2004):

1. Because it can help to clarify research designs
2. To recognise which design will work or not work
3. To help the researcher identify and create designs outside of their past experience.

A balanced view of the different philosophical positions is important because research problems may require a compromise design which draws from more than one tradition (Easterby-Smith et al, 2004). There are three philosophical positions which predominate in management research; these are positivism, social constructionism and realism. Figure 16 shows the continuum of ontological assumptions, developed by Morgan and Smircich (1980) which demonstrates a number of approaches along the continuum of philosophical paradigms.

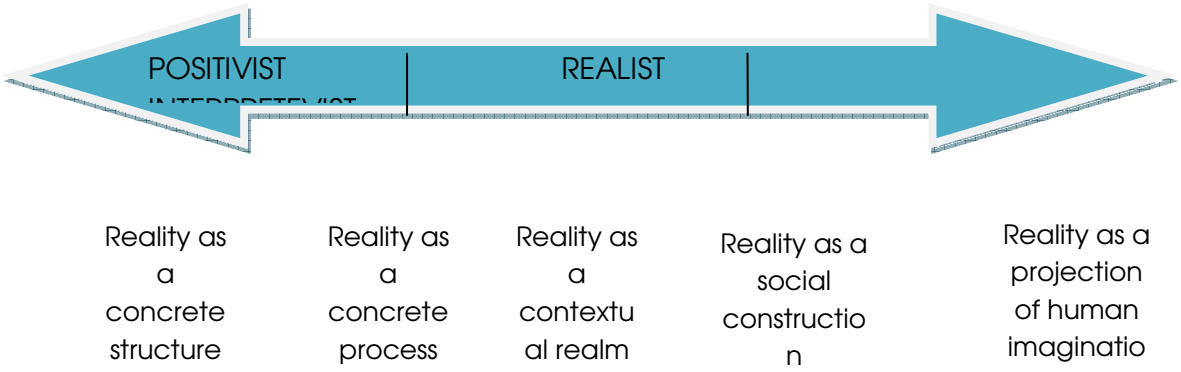


Figure16: Continuum of ontological assumptions (Source: Morgan and Smircich, 1980)

Saunders et al (2007) describes the research process as an 'onion'. The model (figure 17) illustrates the various components of research design.

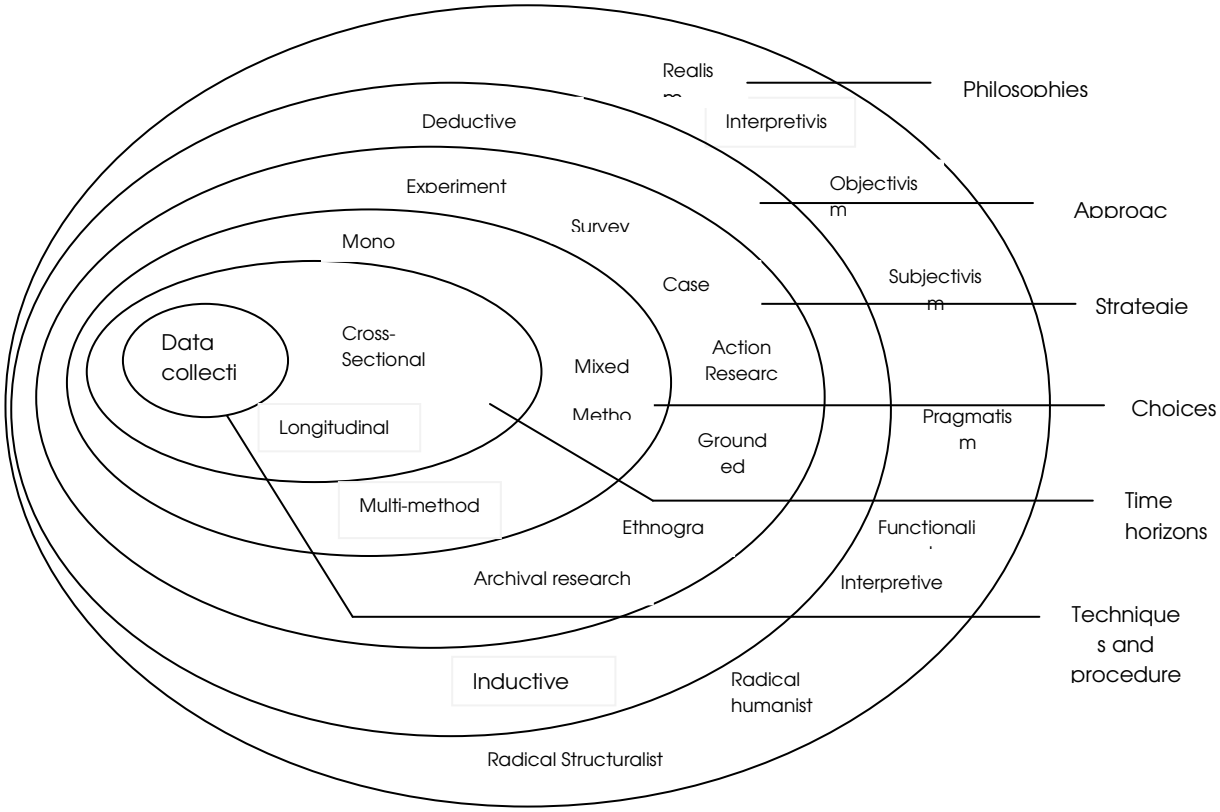


Figure 17: The Research Process 'onion' (Source: Saunders et al, 2007)

3.3 Positivism

Positivism, takes the stance of the natural scientist and the social world exists externally and its properties should be measured through objective methods, rather than being inferred subjectively (Easterby-Smith et al, 2004). The researcher adopting this philosophy undertakes research in a value-free way (Saunders et al, 2007). Advocates of this position believe that the researcher will be unaffected by

their own beliefs and values. There is an assumption that the researcher is independent of and unaffected by the subject of the research (Remenyi et al, 1998) cited in Saunders et al, (2007).

Positivist research has a structured methodology and can be easily replicated (Gill and Johnson, 2002) cited in Saunders et al, (2007). An advantage of this philosophy is that it would be easier for researchers to prove that they were objective and that their own values did not influence the research. Heron (1996) cited in (Saunders et al, 2007) suggest the use of personal value statements in relation to the area of study; can also support objectivity. There are a further two assumptions with this philosophy: Firstly, an ontological assumption, that reality is external and objective and secondly, an epistemological assumption, that knowledge is only significant if based on observations of external reality (Easterby-Smith et al, 2004). The elements of positivist philosophy are summarised in table 4.

	Positivism	Social Constructionism
The observer	Must be independent	Is part of what is being observed
Human interests	Should be irrelevant	Are the main drivers of science
Explanation	Must demonstrate causality	Aim to increase general understanding of the situation
Research progresses through	Hypotheses and deduction	Gathering rich data from which ideas are induced
Concepts	Need to be operational so they can be measured	Should incorporate stakeholder perspectives
Units of analysis	Should be reduced to simplest terms	May include the complexity of 'whole' situations
Generalization through	Statistical probability	Theoretical abstraction

Sampling requires	Large numbers selected randomly	Small numbers of cases chosen for specific reasons

Table 4: Comparison of positivism and social constructionism (Easterby- Smith et al, 2004)

3.4 Social Constructionism

Social constructionism is also referred to as "interpretive" methods. 'Reality' is determined by people rather than by external factors (Easterby-Smith et al, 2004). This view takes into account the different meanings that people place on their experience. Easterby-Smith et al, (2004) compares social constructionism philosophy with that of positivism (table 4). According to Saunders et al, (2007) there are advantages and disadvantages relating to both social constructionism and positivism (table 5).

	Positivism	Social Constructionism
Advantages	1. Economical collection of large amounts of data. 2. Clear theoretical focus for the research from the outset. 3. Greater opportunity for researcher to retain control of the research process. 4. Easily comparable data.	1. Facilitates understanding of how and why. 2. Enables researcher to be alive to changes, which occur during the research process. *3.* Good at understanding social processes.
Disadvantages	1. Inflexible, direction often cannot be changed once data collection has begun. 2. Weak at understanding social processes. 3. Often doesn't discover the meanings people attach to social phenomena.	1. Data collection can be time consuming. 2. Data analysis is difficult. 3. Researcher has to live with the uncertainty that clear patterns may not emerge. 4. Generally perceived as less credible by non –researchers.

Table 5: Advantages and disadvantages of positivism and social constructionism (source: Saunders et al, 2007)

3.5 Realism

The “realism” philosophical viewpoint is based on the assumption that what the senses show us is reality and that objects have an existence independent of the human mind (Saunders et al, 2007).

There are two types of realism, direct and critical realism. Direct realism states that ***“what you see is what you get”*** (Saunders et al, 2007 page 105). However, according to Bhaskar (1989) ***“what we see is only part of the bigger picture”*** (page 105). Critical realism argues that ***“what we experience are sensations, the images of the real world, not the things in the real world, not the things directly”*** (Saunders et al, 2007 page 105). Therefore different observers may have different viewpoints.

The direct realist perspective suggests the world is relatively unchanging and operates only at one level in an organisation (Saunders et al, 2007). In contrast critical realists consider that the world operates at multiple-levels within an organisation (Saunders et al, 2007).

Realism is therefore more concerned with exposing and identifying what reality is as opposed to discovering it (Easterby-Smith et al, 2004. Table 6 represents the three philosophical views discussed and corresponding methodological implications.

Social Science Epistemologies			
	Positivism	**Realism**	**Social Constructionism**
Elements of Methods			
Aims	**Discovery**	**Exposure**	**Invention**
Starting points	**Hypotheses**	**Suppositions**	**Meanings**
Designs	**Experiment**	**Triangulatio**	**Reflexivity**

		n	
Techniques	**Measurement**	**Survey**	**Conversation**
Analysis/interpretation	**Verification/falsification**	**Probability**	**Sense-making**
Outcomes	**Causality**	**Correlation**	**Understanding**

Table 6: Methodological implications of different epistemologies within social science (source: Easterby-Smith et al, 2004)

DePoy and Gitlin (2005) propose that the selection of a research tradition and design strategy is based on three considerations:

1. The purpose of conducting the research
2. The way in which you reason about a phenomenon
3. The level of knowledge development in the area to be investigated

3.6 Philosophical Position

The criteria for selecting research philosophy were based on the following:

- The principal objective of this research is to investigate any barriers to incident reporting, which may exist at The Christie NHS Foundation Trust, using the conceptual framework developed in chapter 2 (figure 14).
- It has been clearly recognised from the literature review that barriers to incident reporting exist, although the body of literature is limited. It is not clear if any of the barriers identified in the literature exist at The Christie NHS Foundation Trust. Therefore the starting position of this research is to reveal new understanding, a position that is associated with a social constructionist approach to the research design.

- The level of knowledge on barriers to incident reporting is not well defined and therefore rules out a positivist approach to the research.
- The value the organisation holds is a dominant factor in the conceptual framework and is therefore a significant element of the research. In order to understand what individuals within the organisation see as important it is vital to converse with them. This technique is also associated with social constructionism. To gain wide cross-section of views a survey technique is also utilised which supports a realist approach.

Overall the combination of social constructionism and realism approach is most suitable for this research design because the researcher has to interpret opinions on the issue of barriers to incident reporting.

3.7 Research Approach

The approach to research stems from the philosophical viewpoint taken by the researcher. As shown by the research 'onion' (figure 16) the research approach can be either deductive or inductive.

The deductive approach is research involving the testing of a theoretical proposition by the employment of a research strategy specifically designed for the purpose of its testing (Saunders, et al, 2007). According to Robson (2002) cited by Saunders et al, (2007, page 117) there are five stages through which deductive research will progress:

1. Deducing a hypothesis
2. Expressing the hypothesis in operational teams

3. Testing the operational hypothesis
4. Examining the specific outcome of the inquiry
5. Modifying the theory in the light of the findings

This approach is useful for explaining relationships between variables. It is primarily used for the collection of quantitative data and would require a highly structured methodology to facilitate replication (Gill and Johnson, 2002) cited in Saunders (2007). This approach stems from a positivist perspective and is therefore not applicable to this study; nonetheless, the deductive approach requires the formulation of a hypothesis. This was not the approach used in this research, as objectives were developed before the research was started as opposed to using a developed hypothesis. It is not unusual to combine deductive and inductive approaches in research. As suggested by Creswell (1994) cited in Saunders (2007), the approach taken will be dependent on the research topic. Table 7 shows the main differences between each approach.

Deduction emphasises	**Induction emphasises**
Scientific principles	Gaining an understanding of the meanings humans attach to events
Moving from theory to data	A close understanding of the research context
The need to explain causal relationships between variable	The collection of qualitative data
The collection of quantitative data	A more flexible structure to permit changes of research emphasis as the research progress
The application of control to ensure validity of data	A realisation that the researcher is part of the research process

The operationalisation of concepts to ensure clarity of definition	Less concern with the need to generalise
A highly structured approach	
Researcher independence of what is being researched	
The necessity to select samples of sufficient size in order to generalize conclusions	

Table 7: differences between deductive and inductive approach (Source: Saunders et al, 2007)

An inductive approach is research involving the development of a theory as a result of the observation of empirical data (Saunders et al, 2007). This approach is appropriate to be used with small numbers, researchers are likely to work with qualitative data and use a variety of methods to collect this in order to identify differing views (Easterby-Smith et al, 2004). An inductive approach was applied in this research, with some elements of a deductive approach; figure 18 gives an overview of the approach taken.

The inductive and deductive approaches are shown along the continuum because the research does not fit neatly into one category. An inductive approach would mean that there was no initial hypothesis, which is the case in this research. However, there are previous theories identified in the literature review which were utilised in developing the objectives. Therefore, the approach used would include some elements of a deductive approach, whilst embracing elements from the inductive approach.

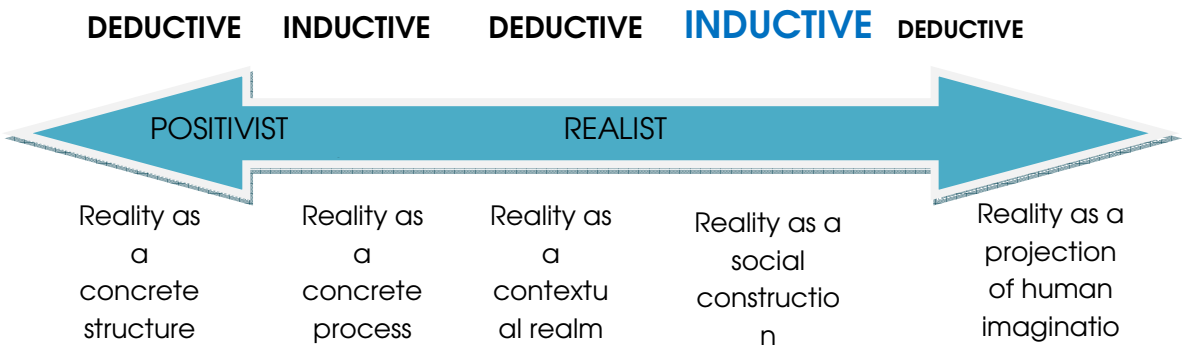


Figure18: Continuum of ontological assumptions including the research approach utilised (Source: Author, 2009)

3.8 Research Strategy

It has already been established that a combination of social constructionism with a tendency toward realism will be used (figure 18).

There are various research strategies which can be used as shown below: Some are suited to deductive and others are more suited to an inductive approach, however, they are not mutually exclusive.

- Experiment- this type of research strategy involves the use of theoretical hypothesis, the selection of known samples and the control of all variables, this approach is not applicable to this study and therefore will not be used.
- Survey- is often associated with the deductive approach (Saunders, et al, 2007). It is obtained using questionnaires which are used to collect data or opinions. Data collected by this process may be slow to collate, and there are limitations on the types of questions which can be explored.

- Case study- a strategy usually used in explanatory or exploratory research. Yin (2003), cited in Saunders, (2007) argues that multiple case studies are preferable to a single case study, as a single study would require strong justification. This approach is not used because it would not yield the depth of coverage required to address the research objectives, but a single case study is used.
- Action research- this strategy is concerned with the resolution of organisational issues involving the members of the organisation. The researcher is part of the organisation and not a consultant (Coghlan and Brannick, 2005). Work by Schein (1999), cited in Saunders, (2007) emphasises the importance of employee involvement throughout the research. An action research strategy combines both data gathering and facilitation of change. This approach is applicable to this research, because theories were developed from the findings of the questionnaire, which were later investigated via the use of semi-structured interviews (Appendix H).
- Grounded theory- According to Goulding (2002) this strategy is useful for predicting and explaining behaviour. Theory is developed from data generated by a series of observation and is suited to an inductive approach. This approach is applicable to this research. However, as a participant observer it is not practical to directly observe a cross-section of staff and maintain my position as the blood transfusion manager. Also my presence could create a bias towards reporting incidents and therefore reduce

understanding on the issue of barriers to incident reporting. This is known as the 'Hawthorne effect' cited in Gill and Johnson (2005, page 60).

- Archival research- this strategy makes use of administrative records and documentation. This approach is applicable for this research but will not be used because of the time constraints. The strategies used in the research are show in red (figure 19).

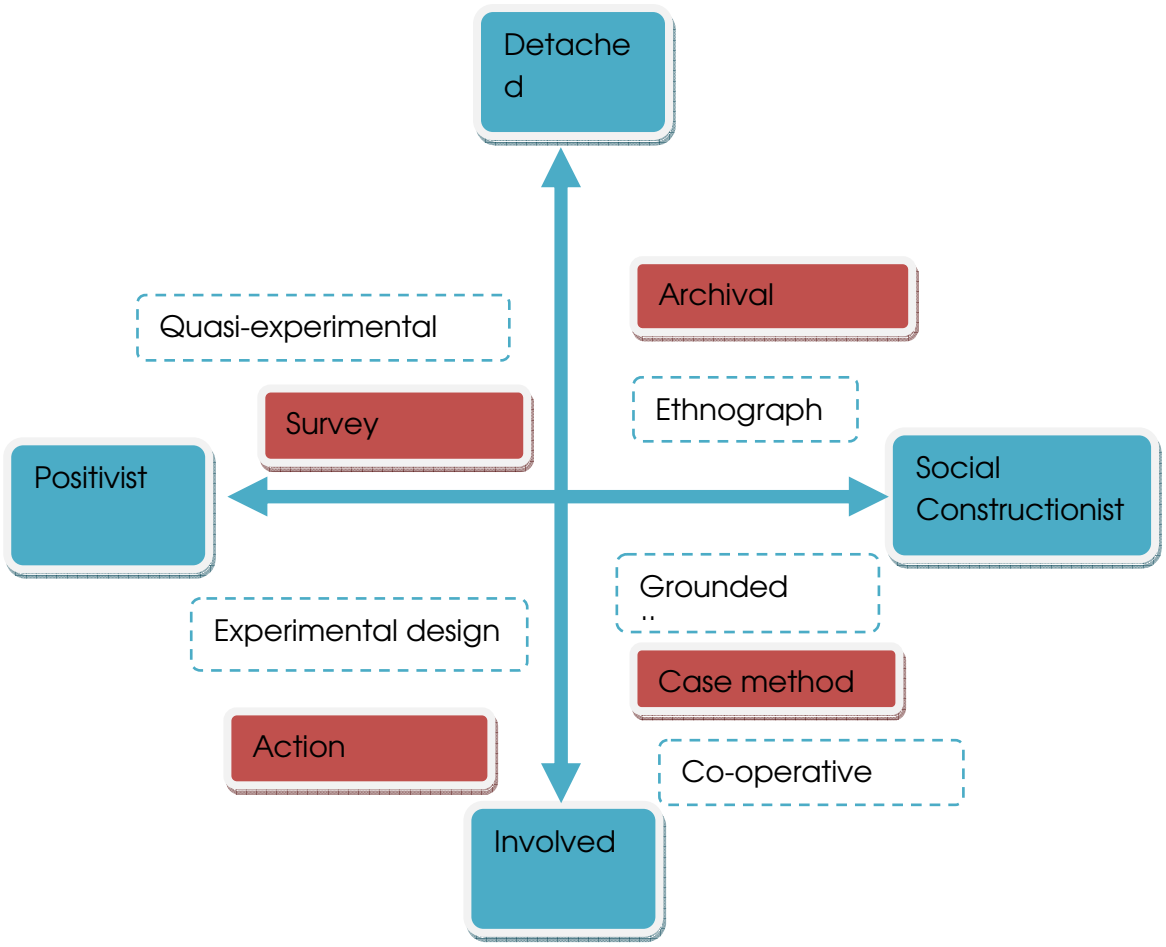


Figure19: Matrix of research philosophies and designs (source: Easterby-Smith et al, 2004)

3.9 Choices

Multi-methods can be used which is the use of more than one data collection and analysis procedure to answer the research question (Saunders et al, 2007). Tashakkori and Teddlie (2003) cited in Saunders et al, (2007) refer to this method as research design.

The research was conducted in three stages:

1. Survey of a cross-section of staff working at The Christie. This includes staff of various grades and clinical groups. The questionnaire findings will be used to form a structured template to support the semi-structured interviews.
2. Semi-structured interviews with relevant staff, which includes; Risk Manager, Quality Manager and the Clinical Governance Director. Any evidence of organisational barriers to incident reporting was discussed at interview.
3. Search and review the literature and carryout an analysis of secondary data (National Staff Survey, 2008) this will be explained later.

A mixed method is a general term for when both quantitative and qualitative data collection techniques and analysis procedures are used in the research

design (Saunders et al, 2007). This research used a multi method approach. Tashakkori and Teddlie (2003) cited in Saunders et al, (2007) argue that multiple methods allow a better understanding of research questions and therefore findings can be trusted. There are two advantages of using multiple methods:

- Different methods can be used for different purposes in a study.
- Mixing methods enables triangulation to take place.

3.10 Time horizons

This research was a cross-sectional study. A cross-sectional study often employs the survey strategy (Easterby-Smith et al, 2004) and gives a 'snapshot' of the organisation. However longitudinal research is valuable because it has the capacity to study change and development. It was suggested by Adam and Schvaneveldt (1991) cited in Saunders et al, (2007) that by observing people in this way the researcher is able to provide a measure of control. However, this was not used as it is difficult for the researcher to be objective and would be limited by the time constraints (Saunders et al, 2007).

3.11 Quantitative and Qualitative Data

Primary data collection methods can be divided into two types- qualitative and quantitative (Hair, 2007).Table 8 shows the distinctions between quantitative and qualitative data.

Quantitative data	Qualitative data
Based on meanings derived from numbers	Based on meanings expressed through words
Collection results in numerical and standardized data	Collection results in non-standardised data requiring classification into categories
Analysis conducted through the use of diagrams and statistics	Analysis conducted through the use of conceptulisation

Table 8: distinctions between quantitative and qualitative data (Source: Dey (1993); Healey and Rawlinson (1994) cited in Saunders et al, 2007)

Quantitative data collection involves gathering numerical data using structured questionnaires or observation guides to collect primary data from individuals (Hair, 2007). Quantitative data collection is also referred to as survey research, and is the best approach when large samples are used. This research uses qualitative data in the main, however, quantitative methods are used to analyse the data, but under these circumstances it is a matter of collating opinions and not facts.

A self-completion survey is one of the methods employed in this research. This approach collects data using structured questionnaires. A structured questionnaire is a predetermined set of questions designed to capture data from respondents (Hair, 2007). It is a scientifically developed instrument for measuring key characteristics of individuals (Hair, 2007).

A questionnaire consists of a standard set of questions with limited answers. The wording of the questionnaire is important to obtain accurate data. Questionnaires can be delivered in several ways, see table 9 for the advantages and disadvantages of different modes of administration.

Methods of Administrations	Advantages	Disadvantages
Questionnaires issued by post	Wider access and better coverage	Questionnaires must be simple
	Provides anonymity	Low response rate
	Relatively low cost	Points of clarification are not possible
	Large sample size	Follow-up of nonresponse is difficult
	Respondents complete questionnaire at own pace	
Questionnaires issued in person	Establish empathy and interest	Expensive in time and cost
	Can probe complex issues	May lead to interviewer bias
	Clarify respondents' queries	Difficult to obtain wide access
	High response rate	Relatively small sample size
Questionnaires issued electronically	Easy to administer	Loss of anonymity
	Glob reach	Complex to design and program
	Fast data collection and analysis	Limited to computer users
	No interviewer bias	

Table 9 Advantages and disadvantages of methods of administering survey questionnaires (source: Hair, 2007)

Researchers using questionnaires make the assumption that respondents have the knowledge and motivation to complete the questionnaire. The disadvantages of using questionnaires are the potential for bias and the poor response rate, however, the data is amenable to statistical analysis.

The self-completion questionnaire was designed following a review of the literature, to investigate the elements of the conceptual framework (appendix F). The questionnaire consisted predominantly of closed scaled questions. Closed

questions reduce the time it takes to complete the questionnaire, and so may lead to an improved response rate. Closed questions may lead the respondent to select a response which is on the pro-forma, but does not allow them to articulate the ways they understand the matter of interest (Gill and Johnson, 2005). It is usually for these reasons that surveys alone are considered low in validity (Gill and Johnson, 2005).

Some questions also provided an opportunity for additional comments to be included which adds to the validity. In contrast to closed questions, an open question allows the respondent to use their own words potentially allowing for a fuller and richer response. However, open questions can be difficult and time consuming to interpret.

The Likert scale was used for some questions, which allowed the respondent to express the extent to which the respondent agreed or disagreed with an opinion expressed. The aim was to determine the respondents' attitude towards the subject under scrutiny. However, there are individuals who will answer questions in a manner that they feel to be socially desirable rather than their true feelings.

There are also the 'yes' and the 'no' responder who always answer yes or no respectively, despite the structure of the question. It is difficult to control for this kind of bias.

Once the questionnaire was developed it was tested in a small pilot study. It is important to allow time for the construction, revision and refinement of a questionnaire (Oppenheim, 1999).The study group included: the Risk Manager,

Quality manager, Haematology Service Manager, Clinical Audit Manager, Pharmacy Manager, a medic, and three nurses (band 5,6 band 7). Overall the pilot group was skewed by the number of managers; however the author felt that it was important to ensure that managers were happy that meaningful questions were being addressed and so avoid producing any spurious negative or positive results. Nursing staff form the largest group of employees within the trust, and therefore it was important to check that the wording of the questions was not ambiguous particularly to this group of staff. A number of minor changes were made to the questionnaire following discussion with members of the pilot group. The changes made are outlined in (Appendix J).

The questionnaire and covering letter are attached as appendix G. The covering letter sent with the questionnaire informed recipients of the nature of the research. The questionnaire was developed by incorporating issues which had been identified in the literature review as being potential barriers to reporting incidents. The questionnaire was divided into five sections:

- Section 1 determined the demographics of the participants.
- Section 2 assessed understanding of the incident reporting system.

Question 7 requested that slips, trips and falls were not included. This was because the finding of a large multicentre research carried out by Shaw et al (2005: page 282), identified that slips, trips and falls accounted for 41% of the incidents reported in the study. The number of these incidents increased with the patient's age. For patients over sixty the number was 47% and for the over seventy the majority of reports were of this type. Over 95% of the patients at

The Christie would fit into this age range and because there does not appear to be any underreporting of slips, trips and falls (NRLS, 2008) so this group of incidents was not included, to prevent the findings from being skewed.

- Section 3 assessed any barriers to incident reporting. These questions were developed based on findings in the following research (Barach and Small, 2000, Parker and Lawton, 2003, Waring, 2004, Firth-Cozens, 2004, Jeffe et al, 2004, Coyle, 2005, Evans et al, 2006, Schectman, et al, 2006).
- Section 4 assessed learning from incidents and the culture (the following references were helpful in formulating questions: (Cooper, 2005 and Shaw, 2004).
- Section 5 gave the respondent the opportunity to add any further comments.

Sampling techniques

Sampling techniques provide a range of methods that enables a reduction in the amount of data which needs to be collect by considering only data from a subgroup rather than all possible cases (Saunders et al, 2007). The full set of cases from which a sample is taken is called the population. Sampling provides a valid alternative to a census.

There are two sampling techniques, probability and non- probability. Probability sampling was applied to this research and is associated with survey-based research strategies; however this is not suitable for populations of less than fifty

cases (Henry, 1990 cited in Saunders et al, 2007). There are four stages to the process of probability sampling:

1. Identify a suitable sampling frame based on the objectives.
2. Decide on the sample size. Stutely (2003) suggests that a minimum sample of 30 is required to provide statistical analyses.
3. Select sampling technique.
4. The sample should be representative of the population.

A total of 210 staff within the Trust received a questionnaire from a total population of 1000; a limit was placed on sample size because of the time constraints. However, the researcher was happy that this number would allow the collection of a broad range of views from those who work within the trust. The degree of precision (sampling error) is said to be plus-or-minus 6.5% for a sample size of 200 (Oppenheim, 1999).

The questionnaires were issued randomly within specific areas of the Trust to include all clinical specialities. This was achieved by issuing ten questionnaires to managers per location. These were distributed amongst the staff, 160 completed questionnaires were returned; representing a return rate of 76%. This was significantly higher than expected. This was the result of an intranet campaign to encourage staff to respond and management pressure. Management pressure on staff may have resulted in staff providing socially accepted responses when completing the questionnaire.

The questionnaire findings were followed up in interviews with senior managers. The interview questions were structured based on the results of the questionnaires (Appendix G).This allowed the researcher to check whether there was agreement with the conclusions from the findings. It was possible to explore the issues associated with barriers to incident reporting in more details with a small number of senior individuals whose remit would be to consider suggested recommendations and to support implementation of new strategies.

Qualitative data refers to all non-numeric data or data that have not been quantified (Saunders, 2007). Theoretical knowledge is generated from qualitative studies that ask theory-generating questions and is not generated from quantitative studies that insert a set of uniform questions that limit findings to insights (Morse, 2001). However, Glaser (1992) warns that the researcher must be true to what is presented in the data (cited in Morse, 2001), to avoid researcher bias.

There are two approaches to qualitative data collection, which are observation and interviews. Observation is not an appropriate method for achieving the objectives as the observational process itself would directly influence the way that staff react to an incident. However, if staff were unaware of their participation in the research then it could be argued that this method of data collection was unobtrusive and therefore advantageous avoiding any bias. This would be difficult to achieve in a clinical situation and would violate research participant's rights. Another disadvantage of observation is there is no opportunity to observe any unseen thoughts or attitudes. Nonetheless the use of interviews would allow the researcher to understand why barriers to incident reporting occur.

3.12 Interviews

Interviews may be used in both qualitative and quantitative approaches. Bell (1993) indentified three types of interviews: structured, semi-structured and unstructured.

Semi-structured Interviews allow the researcher to exercise their own initiative in following up an interviewee's answer to a question. This approach may result in unexpected and insightful information coming to light. A semi-structured interview has an overall structure and direction, but allows a lot of flexibility to include unstructured questioning. The disadvantages of semi-structured interviews are that there may be a tendency for the focus of the interview to be lost or that too much time is spent on one particular area (Easterby-Smith et al, 2004). The best-known semi-structured interview approach is the focus group (Hair, 2007). This approach was not used in this research, because of the time constraints. Semi-structured interviews were carried out on a one to one basis with senior managers. Ten days prior to the interviews senior managers were asked to complete a blank copy of a SWOT, STEEPLE, Cultural web and EVR models, and these models were all discussed during the interview. The semi-structured interview questions (Appendix H) ranged from closed to open questions.

Interview methods are direct and flexible as questions can be either open-ended or closed. Closed questions are difficult to construct but easy to analyse. The researcher needs only to tabulate the number of responses to each alternative to gain some understanding about what the sample as a whole thinks about an issue. Nevertheless the analysis of open-ended questions is difficult and time consuming

because the researcher needs to develop categories for the assignment of responses. This method creates the potential for researcher bias involved in the categorisation process, particularly with ambiguous responses.

A major drawback to closed questions lies in the possibility of the researcher overlooking some possible responses to questions. This may lead to an inadequate understanding of the issue or an outright bias if the respondents choose an alternative that misrepresents their position. Pre-testing of the interview schedule may overcome this.

Closed questions can be considered to be superficial, whilst open-ended questions offer a richer and fuller perspective on the research question if the respondents are co-operative (DePoy, 2005). The richness may be lost following tabulation; however, the incorporation of excerpts may reduce this.

The researcher repeated answers to ensure clarity and prevent misinterpretation of responses. The same questions were posed to each interviewee, in the same order.

The main weakness of interview method is the influence of the researcher as the interviewer. The quality of the data collected will depend on the proficiency of the interviewer. It is important that the interviewer does not lead the respondent and that neutral, non-directive questioning is used (DePoy, 2005).

Gill and Johnson (2005: page 149) developed a fourfold categorisation (figure 20) of the role that a participant observer can take: complete participant; complete observer; observer as participant and participant as observer.

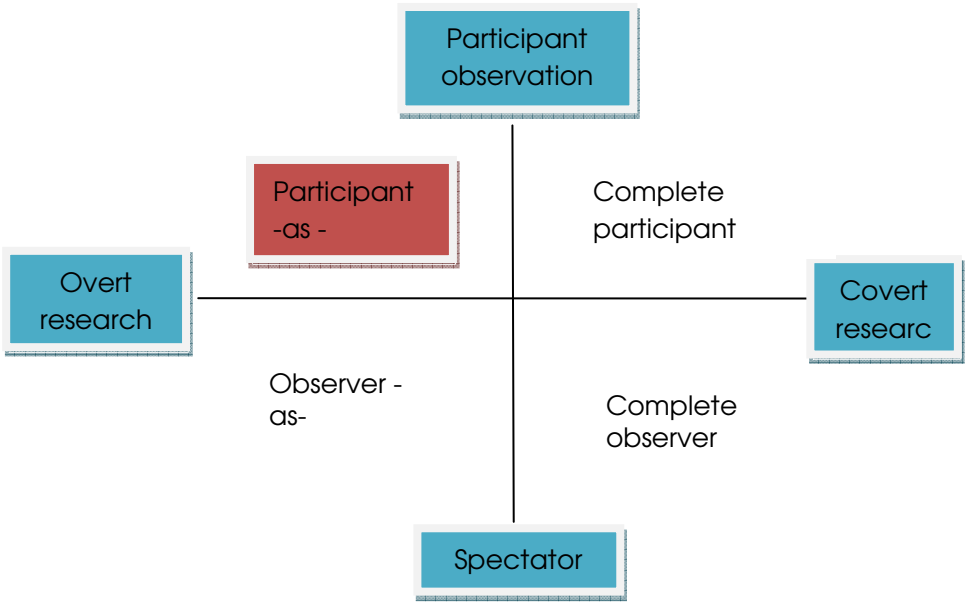


Figure 20: The participant observation role of the researcher shown in red (Source: Gill and Johnson, 2005)

Participant as observer role the researcher and the subjects are aware of the fact that it is a fieldwork relationship (Ackroyd and Hughes, 1992) cited in Saunders, 2007. Delbridge and Kirkpatrick (1994) cited in Saunders, 2007, categorise the types of data generated by participant observation as 'primary', 'secondary' and 'experiential' (table 10). Participant observation is good at explaining 'what is going on' in particular situations and virtually all data collected are useful. However, it can be time consuming and poses ethical dilemmas for the researcher (Saunders et al, 2007).

Data generated		How participant observation was achieved in this research
Primary observations	The researcher notes what happened or what was said.	Interview
Secondary observations	Observers interpret what was said.	Analysis of questionnaires and interviews.

Experiential data	Perceptions and feelings as research progress.	Research Log

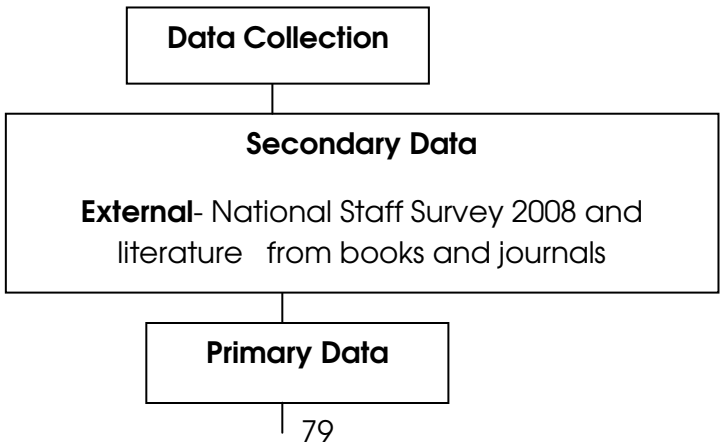
Table 10: Type of data generated using participant observation (source: adapted Saunders et al, 2007)

Participant observation is high in ecological validity because it involves studying social phenomena in the natural contexts (Saunders et al, 2007).

The role of the participant observer in this research was to understand why some incidents are not reported and to establish what can realistically be done to improve the level of incident reporting at The Christie.

3.13 Data Collection

Data can be collected by one or more of the following: interviews, observation and questionnaires (see figure 21) for the various approaches to data collection used in this research. This is a critical stage of the research, if not enough consideration is given to this stage then it could be too late to correct the deficiencies after data has been collected.



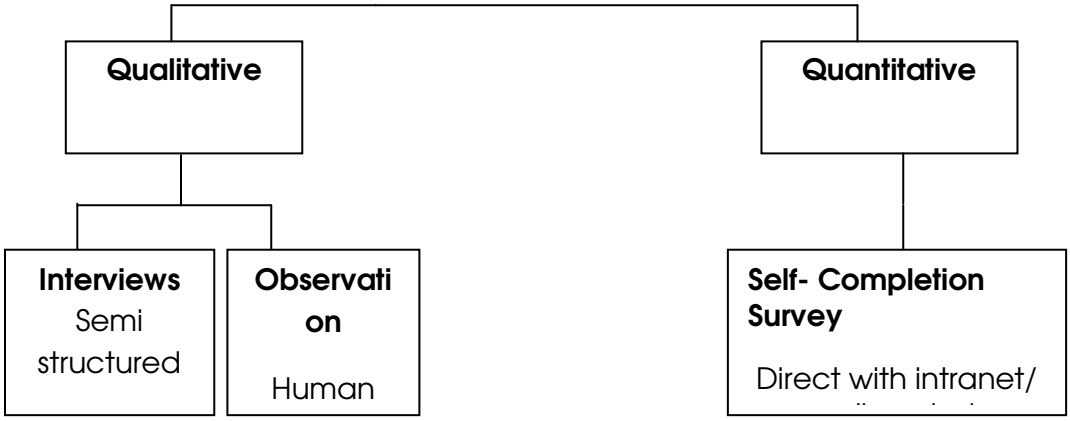


Figure 21: Data Collection Methods used during this research (Source: adapted from Hair, 2007)

Data used for research that was not gathered directly and purposefully for the project under consideration are termed secondary data (Hair, 2007). There are advantages associated with the use of secondary data, which include: saving time, effort and expense (Ghauri and Gronhaug, 2005) cited in Saunders et al, 2007. However, consideration must be given to the fact that the original data may not have been collected with the current research question in mind (Denscombe, 1998) cited by Saunders et al, 2007. However, the theoretical approach and research methodologies may be similar.

The NHS Staff Survey (2008) was conducted by the Healthcare Commission in October 2008 and published in March 2009. The data was used as a quantitative method for data collection and was managed by The Picker Institute. The survey results for The Christie were used for comparison with the primary research findings. The survey is not specifically designed to investigate barriers to incident reporting, however, aspects of the survey relate closely to the elements of the

conceptual framework under investigation. The 2008 survey provides information on the attitudes and experiences of staff in Acute NHS Foundation Trust and is designed to help improve working conditions and practices in healthcare services and therefore the quality of care provided to patients. Any statements or results referring to the National staff survey will be preceded by 'NSS' (National staff survey).

Specific areas of the survey that are useful for analysis include:

- Errors, near misses and incidents (HCC, 2009 page 16)
- Fairness and effectiveness of procedures for reporting errors, near misses or incidents (HCC,2009 page 50)
- Whistle blowing and confidentiality (HCC, 2009 page 48)
- Types of training, learning and development (HCC,2009 page 45)

As previously stated, this research employs research methods which include the use of questionnaires, semi-structured interviews, secondary data and document review in order to validate the data which strengthen the validity and reliability of findings. The research methodology bridge (Moran, 2008), (figure 22) shows how the various methods have been used to achieve triangulation. The text in red represents the disadvantage of a method and green text is the advantages of the method.

Questionnaires				
Closed questions	Poor response	No control over respondents	Easy to analyse	Easy to administer
Semi-structured Interviews				

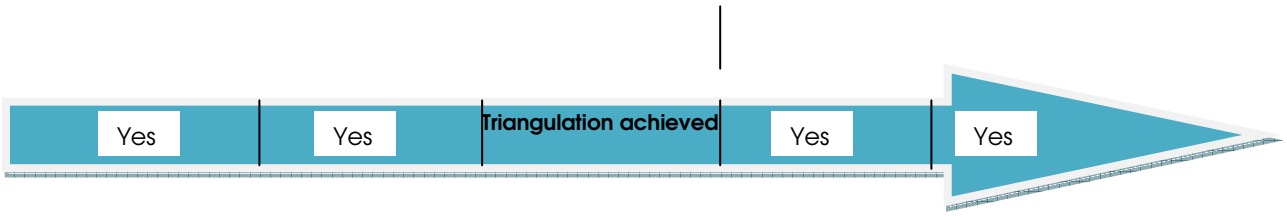


Figure 22: Metaphorical Bridge towards Triangulation (source: Moran, 2008 adapted by Author, 2009)

A systematic review of the literature examined many studies that have been conducted to gain insight into barriers to incident reporting in hospitals. Employing a formal search that used Emerald, Medline, and Proquest, by keywords included: incidents, human errors, near miss, risk, safety, quality, patient safety and barriers to incident reporting. Seven studies were eligible for inclusion. Journals used included: Quality and Safety, Nursing Times, Health Care Risk Report, Nursing Standard, British Medical Journal, Quality and Safety in Health Care and Joint Commission Journal on Quality. References of each citation were reviewed to identify additional descriptions of barriers to incident reporting in the NHS.Relevant books were used throughout the research; however, books were predominantly useful for Chapter three.

3.14 Reliability

Reliability refers to the consistency of the results obtained in research (Gill and Johnson, 2005). According to Easterby-Smith et al, (2004, page 135) reliability is "primarily a matter of stability. The use of multi method approaches (as used in this research) "optimises the reliability and validity" (Gill and Johnson, 2005 page 200). The term "reliability" also refers to the consistency and repeatability of results achieved by separate researchers working on the same topic, working independently, and getting the same or nearly the same results. However, reliability will be viewed differently and depends on the philosophical viewpoint of the researcher (Easterby-Smith et al, 2004). Table11 highlights the perspectives held by the different traditions.

	Positivist	Relativist	Constructionist
Reliability	Will the measures yield the same results on other occasion?	Will similar observations be reached by other observers?	Is there transparency in how sense was made of the raw data?

Table 11: Perspectives on Reliability (Source: Easterby-Smith et al, 2004)

The reliability of the primary research is justified by the use of a questionnaire which was developed based on the findings of a literature review and findings from many other researches investigating the issue of barriers to incident reporting.

Similarly, during the semi-structured interviews, the researcher conducted each interview in the same manner and followed the structured template (Appendix H). The interviewer also repeated answers to clarify meaning and therefore avoid any errors of interpretation.

The secondary data was collected by only selecting data that had a direct link to the research questions.

3.15 Validity

Saunders et al (2007, page 614) define validity in two ways:

1. The extent to which data collection methods accurately measure what they intend to measure.
2. The extent to which research findings are really about what they profess to be about.

It is recognised that this research will only have internal validity to The Christie and cannot be used to generalise about other NHS hospitals, because as it is a single case study.

There is no explicit way to measure validity, however, according to Patchen, (1965) cited in Easterby-Smith et al, (2004) there are a number of ways to estimate it (table 12).

Construct validity	**Yes- this is achieved by this research**	**Extent to which your measurement questions actually measures the presence of those constructs you intended them to measure.**
Criterion validity	**Not applicable to**	**Ability of a statistical test to make accurate prediction**
Ecological validity	**Not-achieved by**	**A type of external validity referring to the extent to which findings can be generalized from one group to another.**

Internal validity	**Yes-achieved by**	**Extent to which findings can be attributed to interventions rather than any flaws in your research design.**
Measurement validi	**Yes-applicable to this research**	**The extent to which a scale or measuring instrument measures what it is intended to measure.**

Table12: Estimation of Validity (Source: Saunders et al, 2007 adapted by Author, 2009)

Once again the philosophical viewpoint taken by the researcher will determine the understanding of validity as shown in table 13. The validity of this research is robust and this is demonstrated by the triangulation process.

	Positivist	Relativist	Constructionist
Validity	Do the measures correspond closely to reality?	Have a sufficient number of perspectives been included?	Does the study clearly gain access to the experiences of those in the research setting?

Table 13: Perspectives on validity (Source: Easterby-Smith et al, 2004)

3.16 Triangulation

Triangulation is also referred to as crystallisation (Maxwell, 2004); it is a basic aspect of data gathering that also shapes the action process of data analysis (DePoy and Gitlin, 2005). In triangulation, one source of information is checked

against other types of sources to determine the accuracy of hypothetical understanding and to develop complexity of understanding. Figure 22 (page 81) shows how multiple approaches bear on the same phenomenon thereby preventing 'gaps' in analysis. Triangulation enables the researcher to validate a particular finding by examining whether different sources provide convergent information. This technique increases the accuracy of information gathering (Bluebond- Langner, (1978) cited in (DePoy and Gitlin, 2005). This research is well triangulated.

3.17 Cross Mapping Matrix

Cross mapping matrix (table 14) is used to ensure congruence between the following three aspects:

- The conceptual framework
- The objectives
- Individual research methods

Key:	Research Objectives and Research Methods		
QA=Questionnaire SSI= Semi-Structured Interview SD = Secondary Data	Objective 1	Objective 2	Objective 3

Elements of the Conceptual Framework	To identify the general issues which influence clinical incident reporting in the NHS, through a literature review.		To identify barriers to incident reporting at The Christie and assess the culture of learning from incidents		To assess the range of strategic/operational choices available to reduce identified barriers to incident reporting, to examine the factors affecting implementation of strategic/operational choice, draw conclusions and make recommendations		
	QA	SSI	QA	SSI	QA		SSI
Culture	NA SD	NA	Q10p13 SD Q14 Q15 Q22	SSI QC.1 SSI QC.2	Q22	SSI QC.3	NA
Learning	NA SD	NA	Q11 SD Q12 Q13 Q16 Q17 Q19 Q21	SSI QL.1 SSI QL.2	Q10p2 NA		SSI QL.3
Resources	NA SD	NA	Q4 SD Q5 Q6 Q8	SSI QR.1 SSI QS.7	Q10p2 Q10p 4 -7 SD	SSI QR.2	SSI QR.3
STEEPLE	**NA** SD	SSI QS.9	NA NA	NA	NA SD		SSI QS.3
Barriers to reporting	NA SD	SSI QS6	Q10p1-15 SD	SSI QS.1 SSI QS.2 SSI QS.3 SSI QS.4 SSI QS.5	Q21p1-9 SD		SSI QS.8

Table 14: Cross Mapping Matrix (source: Author, 2009)

Chapter 4

RESEARCH FINDINGS & ANALYSIS

This chapter presents the findings from the selected research methods discussed in chapter 3. The findings will be structured and presented by research method and the elements of the conceptual framework (table 14), using the following headings:

- Self-completion Questionnaire Results
- Semi-structured Interview Results
- Secondary Data
- Element of Conceptual Framework
- Commentary in relation to the objectives and literature review

4.1 Demographic Profile of staff completing Self-completion Questionnaires

Q1. What band are you?

Of the 160 respondents, 16 % were band 4 or below , 38 % band 5 , 18 % band 6 , 13% band 7, band 3% 8a , above band 8a and 13% . The professional group the respondent belonged to is shown in table 15. The number of years that the respondents had worked for the organisation is shown in figure 23.

Q2. To which of the following staff groups do you belong?

Staff group n =160	
Staff group	**%**
Medical	8
Nursing	70

AHP	17
Students (Nursing and AHP)	5

Table 15: Professional group of respondents

Q3. How long have you worked for the Trust?

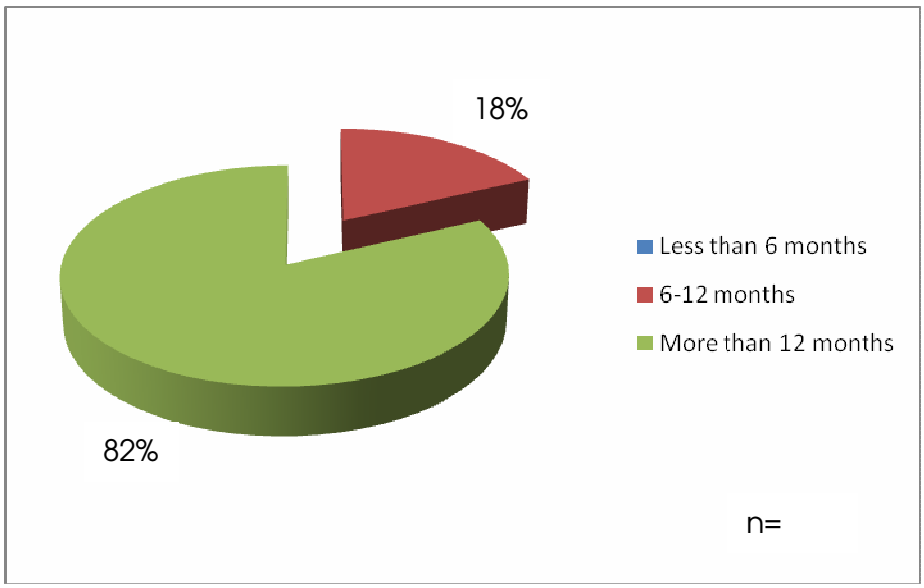


Figure 23: The length of service of respondents at The Christie

4.2 Demographic Profile of staff completing the NHS National Staff Survey (NSS)

A total of 800 staff from The Christie were issued with a NSS. 440 staff at The Christie responded in the NNS survey. This is a response rate of 57% which is above average for acute specialist trusts in England (HCC, 2009) .See table 16,

demographic profile of respondents and table 17 for the respondents' occupational groups.

Table 16: Demographic characteristics of respondents (source: HHC, 2009)

	Number questionnaires returned	Percentage of survey respondents
Age group		
Between 16 and 30	108	25%
Between 31 and 40	99	23%
Between 41 and 50	129	30%
51 and over	98	23%
Did not specify	6	
Gender		
Male	115	26%
Female	319	74%
Did not specify	6	

Table 17: The occupational groups of respondents (source: HHC, 2009)

Occupational group	Number questionnaires returned	Percentage of survey respondents
Nurses, Midwives and Nursing Assistants		
Registered Nurses - Adult / General	74	17%
Registered Nurses - Children	5	1%
Other Registered Nurses	2	0%
Nursing auxiliary / Nursing assistant / Healthcare assistant	12	3%
Medical and Dental		
Medical / Dental - Consultant	13	3%
Medical / Dental - In Training	1	0%
Medical / Dental - Other	2	0%
Allied Health Professionals		
Occupational Therapy	2	0%
Physiotherapy	3	1%
Radiography	38	9%
Other qualified Allied Health Professionals	11	3%
Support to Allied Health Professionals	1	0%
Scientific and Technical / Healthcare Scientists		
Pharmacy	8	2%
Other qualified Scientific and Technical / Healthcare Scientists	46	11%
Support to Scientific and Technical / Healthcare Scientists	17	4%
Other groups		
Admin and Clerical	88	21%
Central Functions / Corporate Services	40	9%
Maintenance / Ancillary	23	5%
General Management	18	4%
Other	25	6%
Did not specify	11	

4.3 Demographic Profile of staff taking part in the Semi-Structured Interview (primary data, n= 3)

Quality Manager

Risk Manager

Director of Nursing and Clinical Governance

4.4 Commentary on the demographic profile of respondents

67% of respondents participating in the primary research were between bands 4-6 and this group represents the frontline staff. The majority of respondents were from a nursing profession (70% primary data). 74% of the NSS data respondents were female. The medical profession is poorly represented in both primary and NSS data (8% and 3% respectively). The allied health professionals are represented in primary data (17%) and NSS data (30% which includes scientific staff). The literature review revealed few studies relating to this professional group and therefore these findings are of interest, adding a new dimension to the literature on barriers to incident reporting in an NHS hospital.

The self- completion questionnaire revealed that 82% of the staff have worked at The Christie for more than one year, which means they have sufficient work experience to be able to comment on this topic.

4.5 Objective 1- main findings

To identify the general issues which influence clinical incident reporting in the NHS, through a literature review.

The main findings relating to this objective are outlined in the literature review table 1 (page 35).Several categories of barriers to incident reporting have emerged from the literature analysis:

- Cultural barriers to incident reporting
- Organisational barriers to incident reporting

- Barriers to incident reporting as a result of fear
- Barriers to organisational learning from incidents

4.6 Semi-Structured Interview Results

The respondents (n=3) were asked to consider this model (STEEPLE) and complete before the interview.

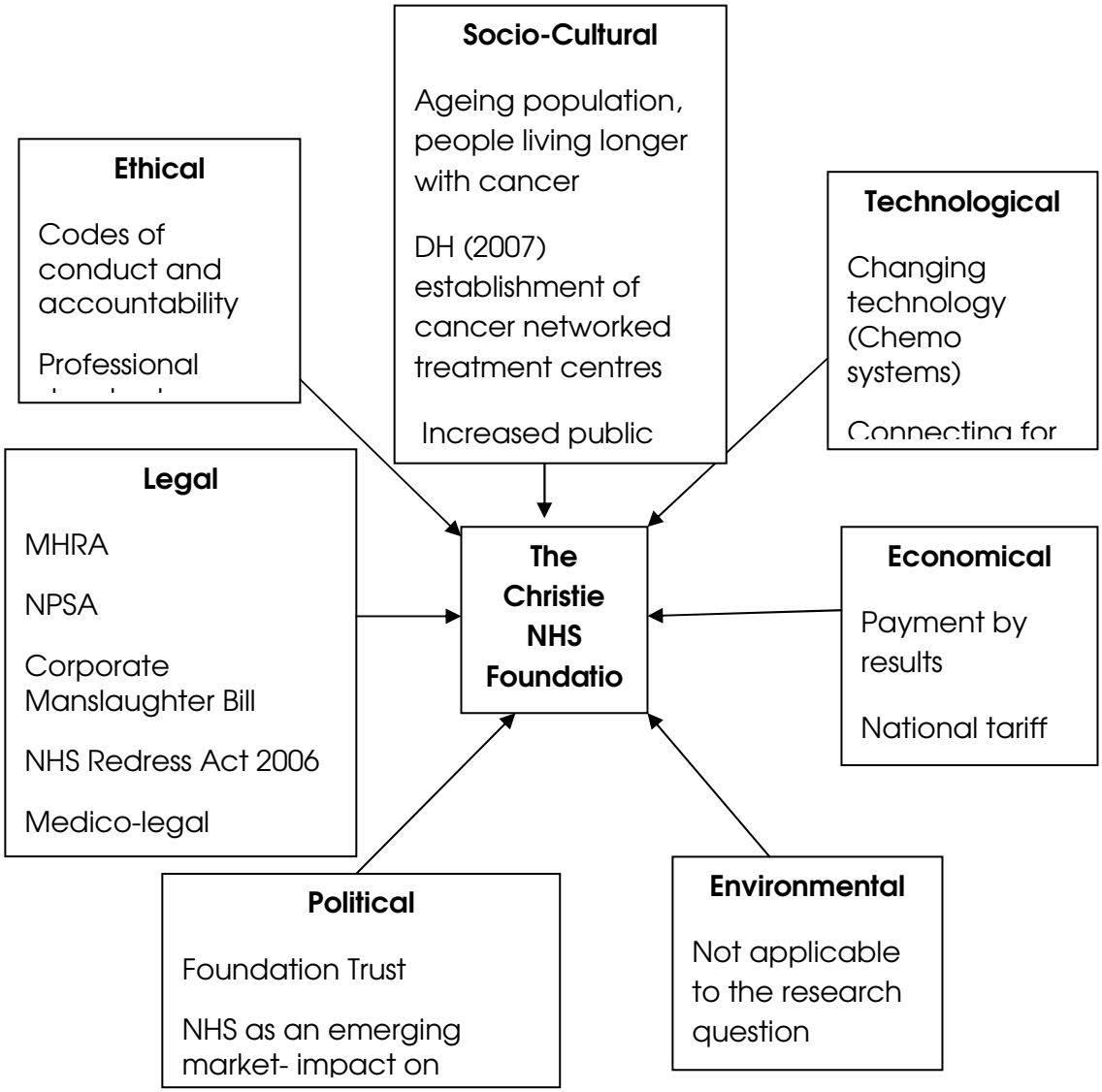


Figure 24: STEEPLE analysis identifying the main drivers for incident reporting (Source: Author, Risk Manager, Quality Manager and Clinical Governance Director, 2009)

Commentary on STEEPLE analysis

STEEPLE analysis identified the following:

All interviewees agreed that staff were bound by codes of conducts and professional standards to report incidents. They all agreed that reporting is therefore mandatory but it was also agreed that ***"reporting was something that managers could not enforce and that it was down to the individual to comply with their professional standards".***

NPSA have set standards on the level of incident reporting by which NHS trust should aim to comply. Legal frameworks such as the NHS Redress Act (2006), require patients to be informed when an incident involving them occur. This could potentially increase the number of litigation cases which occur.

"If patient safety incidents are not managed this could impact on the reputation of the trust and potentially impact on patient's choice". "This could decrease the revenue from payment by results, which could impact on the availability of funds to be spent on new technology".

The respondents (n=3) were also asked to consider this model (E-V-R) and complete before the interview.

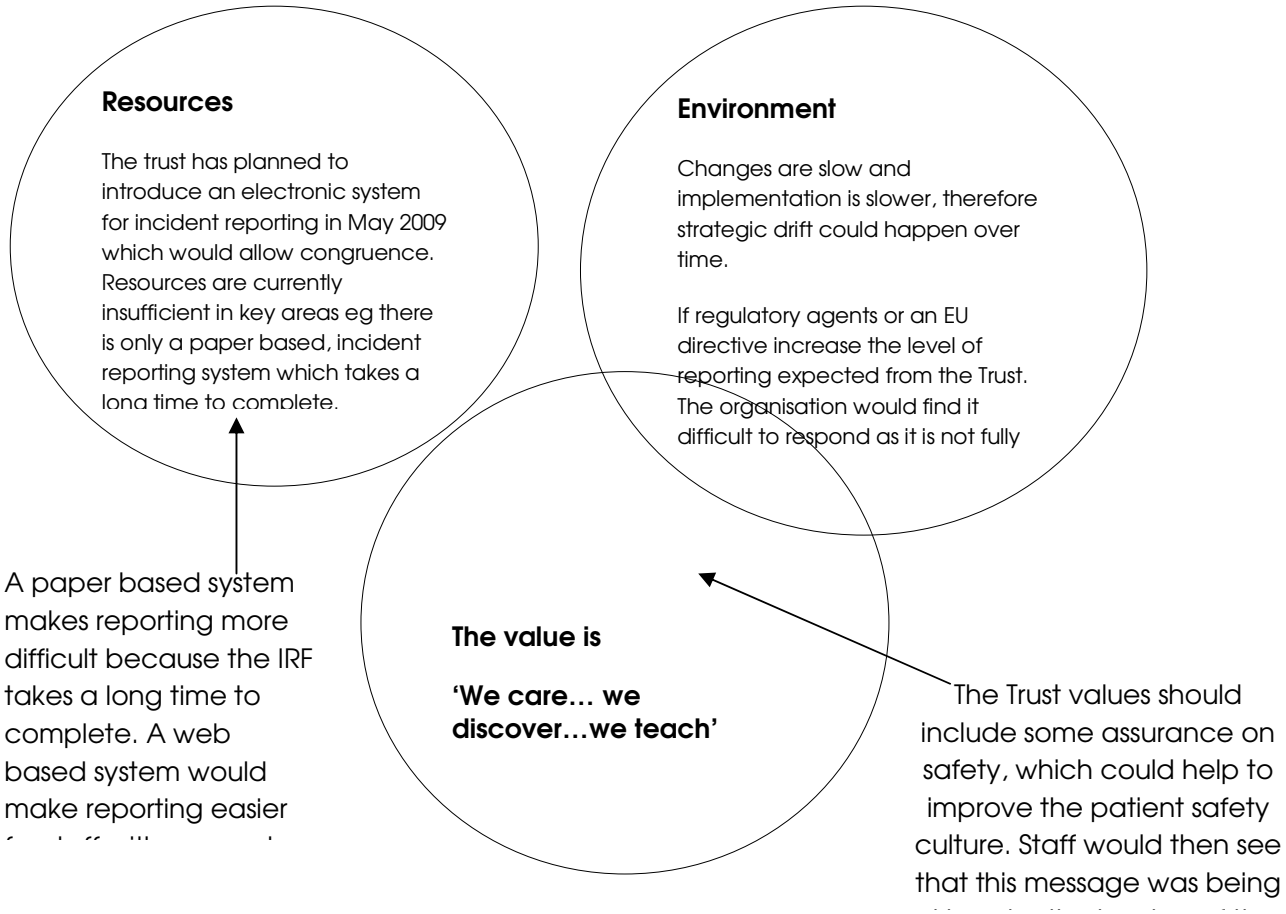


Figure 25: E-V-R congruence (Source: Thompson, (2001) adapted by Author and Director of Nursing and Clinical Governance)

Commentary on EVR model

The EVR model identified the need for a web based reporting system.

"There are plans to introduce a web based reporting in May 2009". "There are some areas of the trust that do not have access to computers and some groups of staff that would need computer training".

4.8 Objective 2- main findings

To identify barriers to incident reporting at The Christie and assess the culture of learning from incidents.

4.9 Self-completion Questionnaire (n=160) (Appendix G): Results

Q6. Do you feel confident about completing an incident report form?

Q7. In your time at this Trust, have you completed an incident report form (please do NOT include falls)?

Q8. Do you know what constitutes a reportable incident?

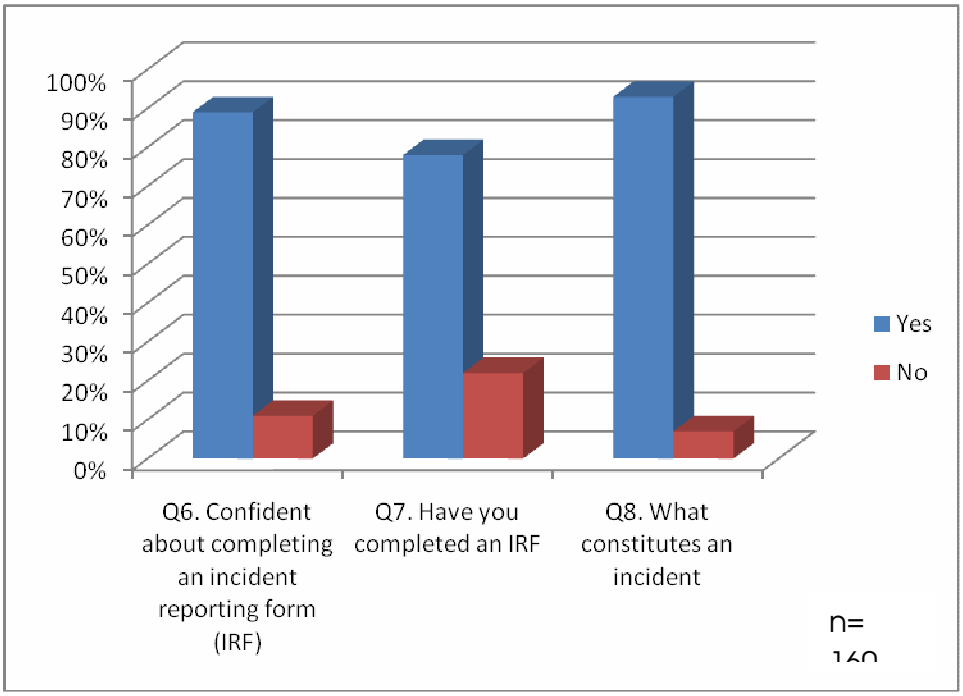


Figure 26: The Christie System knowledge

Q9. How would you define an incident?

The currently accepted definition of a patient safety incident is “any unintended or unexpected incident which could have or did lead to harm for one or more patients receiving NHS care” (NPSA, 2008). The definitions by staff varied depending on the professional groups.

Of the 13 medics taking part only 9 supplied a definition of an incident. From the 9 definitions there were only 2 which came close to the NPSA definition.

- ***“An event (actual or near- miss) that may result in personal injury to a member of staff or patients”***
- ***“Anything that could cause harm to a patient or a member of staff”***

Other comments supplied which did not fit the standard definition included:

- ***“An adverse event”***
- ***“An event that may give rise to injury, dissatisfaction or loss”***

Of the 112 nursing staff surveyed (primary data) 91 said that they knew what constitutes an incident, however the responses reveal some issues of understanding with only 20% of definitions being close to the standard NPSA definition.

- ***“Something that is serious that needs reporting and maybe investigated eg patient fall”***
- ***“A patient being physically aggressive or given wrong information or medication”***
- ***“Any incident that has an actual or possible detrimental effect on patient or staff”***

- ***"An untoward event resulting in breakdown of routine procedures that may damage or present a risk to patients, staff, services, facilities or finance"***

Only 10% of the allied health professionals defined incidents in general terms as shown below.

- ***"An event which has resulted in injury or near injury to a patient staff or an event which could significantly compromise patient care"***
- ***"An event which occurs and has adverse repercussions for patents or staff"***

Allied health professionals tended to report incidents in terms of their specific area of work.

- ***"A circumstance whereby an error has resulted in negative implications for staff or service users. An example may include erroneous results being released"***
- ***"Something that has caused harm or the potential to cause harm which could be due to procedures not being followed or something in which an individual did not know about"***

The students did not supply many definitions of an incident; the two received are shown below:

"An incident is when an error done by one party can affect another party outside of the area that the incident was created"

"Anything adverse to normal functioning of a hospital"

The risk manager agreed that the ***"risk team could provide workshop training at ward level",*** while the Director of Nursing and Clinical Governance agreed that ***"Incident reporting should become part of the mandatory training programme".***

Commentary on the understanding of the incident reporting process

89% of respondents said that they felt confident about completing an IRF (appendix I). However, 22% of the respondents say they have never completed an IRF. Interestingly, 94% of respondents say that they know what constitutes an incident. However, when respondents were asked to define an incident there was some confusion and respondent only defined an incident in terms of their areas of work. This indicates a lack of general understanding with regards to incident reporting. Interviewees agreed that there may be ***"a lack of clarity about what to report"*** this is a barrier that was also identified by Jeffe et al (2004). Interviewees agreed that training at local level would be beneficial.

The risk manager agreed that the ***"risk team could provide workshop training at ward and departmental level"***

The Director of Nursing and Clinical Governance agreed that ***"Incident reporting should become part of the annual mandatory training programme"*** This would be a way of ensuring an update of training for all staff.

NSS (Q19d) indicates that the trust is below the national average for training. This is an area which will need to be addressed.

Self-completion Questionnaires Barriers to incident reporting

Q10. Would any of the following prohibit you from completing an incident form?

Overall sample size (N= 160)	Nursing staff (n=112)	Doctors (n= 13)	AHP (n=27)	Student (n=7)
1.Lack of confidentiality/anonymity	20%	0%	19%	0%
2.Too busy	46%	23%	44%	36%
3.Fear of repercussion	16%	8%	19%	13%
4.Fear of disciplinary action	13%	8%	22%	0%
5.Fear of litigation	15%	8%	19%	0%
6.Labelling & blame for raising concerns	22%	8%	30%	13%
7.Pointless, nothing will be done about it	25%	8%	30%	0%
8.Fear of career and personal reputation at stake	13%	8%	19%	0%
9.Lack of clarity about what to report	21%	23%	30%	38%
10.Difficulty reporting a more senior member of staff	27%	38%	26%	38%
11.Never get any feedback on action taken	40%	15%	26%	13%
12.Reporting interrupts the work process	21%	15%	30%	0%
13.A culture of silence is the norm	10%	8%	11%	25%
14.Everyone makes errors	26%	15%	30%	63%
15.Form takes too long to complete	21%	15%	30%	0%

Table 18: The results of those members of staff that agree with the comments

Commentary on barriers to incident reporting identified

Nurses

The data on barriers to reporting revealed significant variations in the attitude to incident reporting within the different staff groups of the hospital. 21% of nurses indicated that the form takes too long to complete and interrupts the work, a finding

supported by Coyle (2005). 46% of nurses said they were too busy to report incidents this was also a significant finding on barriers to incident reporting made by Coyle (2005), Evans (2006) and Jeffe et al, (2004). If the length of the form was reduced this could save time and remove a barrier. 40% of nurses agree that not getting feedback was a significant barrier to reporting, a finding which supports research carried out by Evans (2006) and Jeffe et al, (2004).

Interestingly, 25% of nurses think it's pointless to report incidents because nothing would be done about it. Yet 51% to nurses also reported that changes occurred as a result of incident reporting, there is clearly some contradiction here and this could just be an issue of differing perceptions.

Overall the level of incident reporting is highest amongst nursing staff a finding which supports previous work by (Lawton, 2002, and Schectman, 2006). Lawton (2002) study was important in identifying the differences in reporting between the doctors and nurses.

Doctors

"The level of reporting amongst doctors is low"

38% of doctors said they had difficulty reporting a more senior member of staff, this also reflects findings from other studies. Only a small percentage of doctors formally report incidents (Evans, 2006), (Lawton, 2002), (Uribe, 2002). The low number of responses from the medics may also reflect an attitude to reporting, according to Bolsin et al, (2005) the professional culture of medicine has not always recognised the need to report adverse events.

Two prominent and interrelated themes can be proposed as influencing medical attitudes to participation in incident reporting:

1) 38% of doctors said they have difficulty reporting a more senior doctor and

2) 15% of doctors say they never get feedback on action taken following incidents. This is supported by the response to the question, which asked how feedback on incident reporting was given. 54% of doctors responded 'no' indicating that they never get any feedback on incidents. It follows that if few doctors report incidents then there will be little to feedback on. However, 23% of doctors said they received feedback from a manager and 15% received feedback via e-mail. This method of feedback is surprising as managers have no way of ensuring that the e-mail was read and understood by the intended party.

Students

Findings indicate that 63% of students believe that everyone makes mistakes and therefore feel empowered to report incidents. This is supported by Firth-Cozens (2004), who demonstrated that student nurses were more open in reporting their own mistakes. 25% of students felt that a culture of silence was the norm; this was challenged by the Risk Manager who stated that ***"a lot of time had been spent on this group and that this finding was a surprise"*** it was also felt that this was not supported by the National staff survey (HCC, 2009). A comment made by several students at the end of the self-completion questionnaire was that ***"senior staff reported errors made by student but did not report their own mistakes".*** This group of staff also found it difficult

reporting a more senior member of staff (38%). A lack of clarity and being too busy was also cited as barriers to reporting (38%) respectively.

AHP-group

44% of AHP felt that being too busy was a barrier to reporting. All interviewees were in agreement that this was an ***"excuse and that staff had 24 hours in which to report an incident".*** However, the NSS data supports the view that staff feel that they are too busy (HCC, 2009).

Reducing the length of the form would reduce the barrier, however all interviewees agreed that there was a minimum amount of data required for an investigation to take place so the form could only be slightly reduced. 30% of AHP said there was a lack of clarity about what to report. "***The forms could also be modified to give clear indication about what constitutes an incident".*** Interviewee agreed that ***"this information could be made available on the trust intranet".***

Within the AHP group Pharmacy and Pathology operate their own independent error logging system. This was a source of some confusion as staff were not always clear when an error should be reported as a trust incident and when to complete an IRF. This is therefore an organisational barrier to incident reporting. The Risk Manager was not happy with this arrangement because ***"both systems operated in parallel and there was little evidence of information transfer, putting the trust at risk."***

30% of AHP fear blame and 30% thought it was pointless reporting as nothing would be done about it. A lack of feedback and reporting more senior staff is also a

barrier for this group of staff (26% respectively). 22% of AHP fear disciplinary action being taken this was the highest across the groups. ***"This was probably the result of disciplinary action being taken in the past, the culture is now changing".***

Overall sample size (N= 160)	Nursing Staff (n=113)	Doctors (n=13)	AHP (n=27)	Student (n=7)
1.Lack of confidentiality/anonymity	71%	100%	63%	88%
2.Too busy	50%	77%	52%	63%
3.Fear of repercussion	78%	85%	56%	8%
4.Fear of disciplinary action	81%	85%	52%	88%
5.Fear of litigation	74%	69%	44%	88%
6.Labelling & blame for raising concerns	69%	77%	56%	63%
7.Pointless, nothing will be done about it	62%	92%	56%	88%
8.Fear of career and personal reputation at stake	74%	77%	52%	88%
9.Lack of clarity about what to report	68%	69%	56%	50%
10.Difficulty reporting a more senior member of staff	65%	54%	59%	50%
11.Never get any feedback on action taken	47%	62%	52%	63%
12.Reporting interrupts the work process	72%	85%	67%	100%
13.A culture of silence is the norm	81%	84%	70%	63%
14.Everyone makes errors	61%	85%	63%	38%
15.Form takes too long to complete	70%	69%	56%	75%

Table 19: The results of those members of staff that disagree with the comments

It is interesting that doctors disagreed most strongly of all groups with most categories of barriers to reporting. The lowest result 54% indicate that doctors considers this most important. This is further supported by the fact that 38% doctors have said that they would have difficulty reporting a more senior doctor.

Interviewees agreed that fear of disruption to career progression could be a barrier for some staff.

"*It would not be unreasonable to assume that fear would be an important factor in not reporting a more senior doctor".* Indeed fear was a major factor identified in the literature (Lawton, 2002, Firth-Cozen, 2003, Jeffe et al, 2004, Coyle, 2005, Schectman, 2006).

Table 20 shows the overall ranking of the top five barriers to incident reporting at The Christie NHS Foundation Trust. It is interesting that *"being too busy"* is ranked highest by all groups, yet this is the only barrier that senior management do not accept as being a 'real' barrier to incident reporting. Table 21 shows the five barriers ranked by professional groups.

Five top barriers identified
1. Too busy
2. Lack of clarity about what to report
3. Difficulty reporting a more senior member of staff
4. Never get any feedback on action taken
5. Form takes too long to complete

Table 20: Top five barriers listed by all professional groups

Overall sample size (N= 160)	Nursing staff (n=112)	Doctors (n= 13)	AHP (n=27)	Student (n=7)
1. Too busy	1	3		
2. Never get any feedback on action taken	2		1	
3. Difficulty reporting a more senior member of staff	3	1		2
4. Lack of clarity about what to report		2	3	3
5. Everyone makes errors				1
6.Labelling & blame for raising concerns			2	

Table 21: Top three barriers ranked by each professional group

Q14. Would you feel comfortable reporting an error made by someone else?

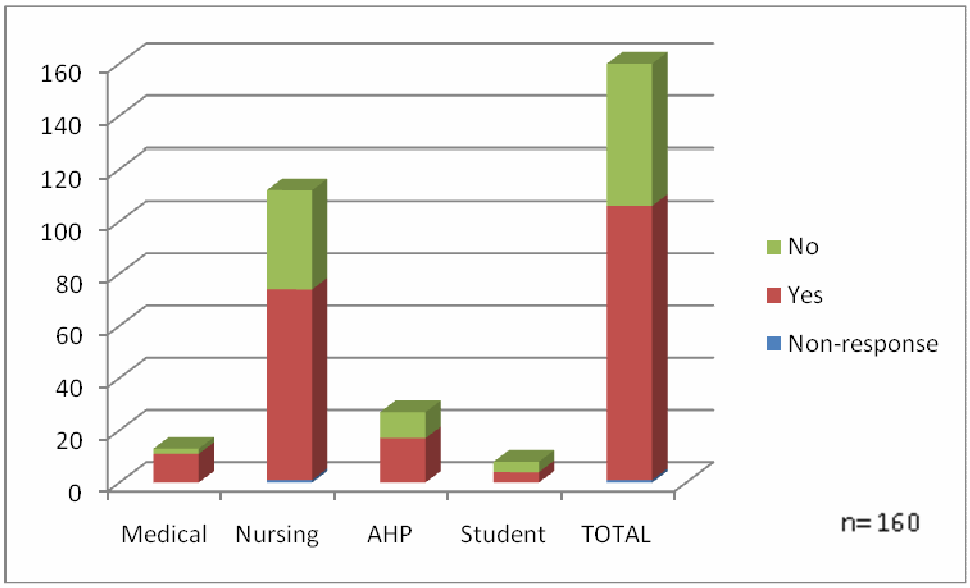


Figure 27: Reporting an error made by someone else

Q.15 Do you view whistle blowing and incident reporting as the same?

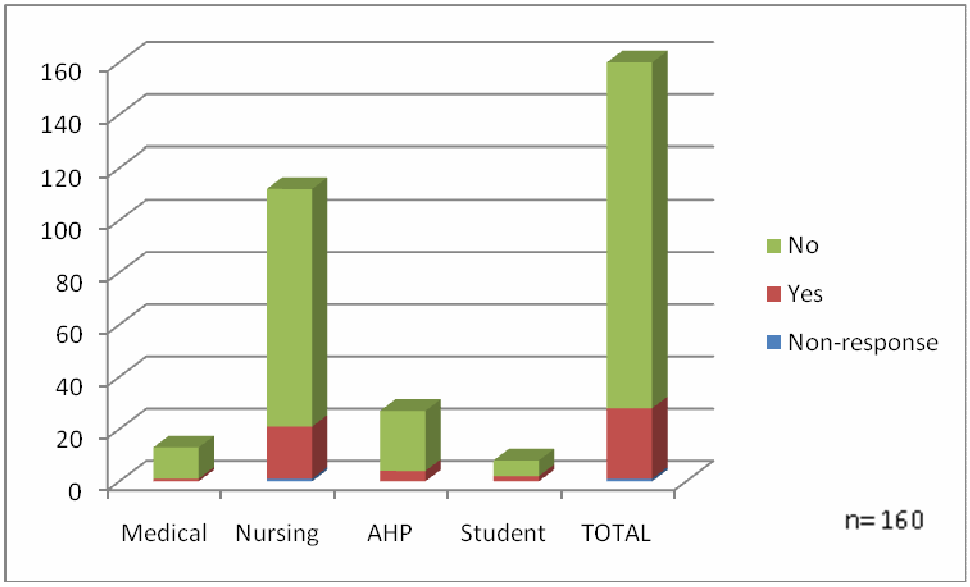


Figure 28: Whistle blowing and incident reporting

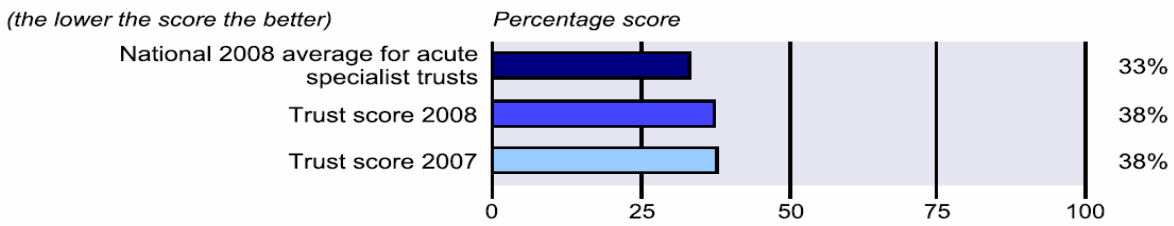
Commentary on reporting errors made by others

34% of respondents would not feel comfortable reporting an error made by someone else. 17% of respondents viewed whistle blowing and incident reporting in the same way. The negative connotation associated with whistle blowing could act as a barrier for this group, senior managers agreed that:

"There is always room for improvement in the reporting culture"

4.10 Secondary Data Results on incident reporting at The Christie

NSS- KF 21. Percentage of staff witnessing potentially harmful errors, near misses or incidents in last month (n=440)



Commentary on NSS results

NSS data indicates that, 38% of staff at the trust had witnessed at least one error, near miss or incident which could have hurt staff, patients or service users. The trust's score of 38% was in the highest (worst) 20% of acute specialist trusts in England (HCC, 2009). This ranking has not changed significantly since the 2007 survey, when the trust also scored 38%. This finding indicates that staff are observing incidents but not reporting them. This finding coupled with the NPSA (2008) findings on the level of incident reporting, supports the view that there are barriers to incident reporting at The Christie NHS Foundation Trust.

According to the national staff survey (Q23g) staff are provided with feedback following incidents. Q23f staff also indicated that they are informed about incidents. It would appear that some staff respond differently to the same question depending on who is asking the question.

4.11 Culture- Self-completion Questionnaires Results

Q22. In your view which of the following best describes this organisation's culture?

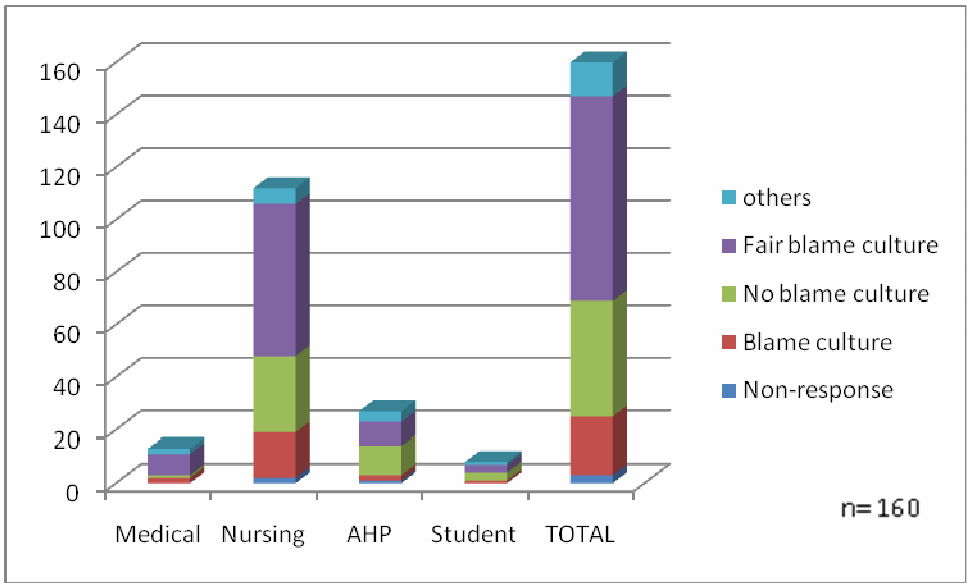


Figure 29: The culture of The Christie

Commentary on the culture of incident reporting at The Christie

77% of staff considers the culture at The Christie to be 'no blame' or 'fair blame', however, 14% of staff considers the trust to have a 'blame culture' and therefore this is a barrier to reporting for a small group of staff. Interviewees agreed that 14% was a small number and that this possibly represented those staff for which disciplinary action had to be taken.

4.13 Semi-Structured Interview Results

SSI-QC.1 How would you describe the culture at The Christie in relation to incident reporting?

"There is a good culture of incident reporting, over the last 8 years it's become a cultural norm"

All managers interviewed agreed that the culture of incident reporting was good and felt that there was a good level of awareness among the majority of staff with regard to incident reporting and its importance. However, all interviewees expressed the view that staff had a tendency to only report serious incidents and would not necessarily report near misses or observed incidents involving other members of staff. The Director of Nursing and Clinical Governance felt that:

"There is always room for improvement in the reporting culture"

SSI-QC.2 37% of respondents do not feel comfortable reporting an incident made by someone else, how might this be addressed?

Most respondents feel that it was everyone's responsibility to report incidents, this could remove ownership, what do you feel? - would it be better to reduce confusion by saying it is the responsibility of the individual involved in the incident to report it?

The Quality Managers views follow, which summarised the views of all interviewees (n=3).

"There is a particular problem for junior doctors and students, as reporting a senior member of staff whom would be responsible for developing your career and writing a reference would be madness. I can see how that would create a barrier for junior doctors"

Interviewees felt that this was an area that would be difficult to address and that this was an issue for the Medical Director. Due to the time constraints the researcher was unable to make an appointment with the Medical Director to discuss this issue. All interviewees (n=3) agreed that this issue relates to leadership because it was about attitudes to reporting and not the reporting system itself.

"Medical staff need to have confidence in the reporting system, there needs to be a change in attitude amongst medics, who feel that reporting incidents is below them"

SSI-QC.3 13% of respondents view incident reporting and whistle blowing in the same way, can you comment on this?

When questioned about this issue it emerged that there was inappropriate use of the incident reporting system and that it had been used to ***"name and shame".*** It was agreed by all managers that there was a negative connotation associated with whistle blowing and that some staff felt that the incident reporting was the same as whistle blowing and therefore did not report incidents.

"When staff becomes frustrated they use the incident reporting system to whistle blow, this may be where the link came from"

When interviewees were asked what practical things could be done to prevent this, the following suggestions were made:

- ***"There needs to be feedback so that staff are challenged about inappropriate use"***
- ***"Introduce 'gatekeepers' named people who can technically validate incidents, and therefore weed out inappropriate incidents"***

SSI-QC.4 Can the 14% of respondents whom believed that a blame culture was predominant, be convinced that there is a fair blame culture here at The Christie?

The managers interviewed felt there was an *"open and fair blame culture"* but agreed that some incidents resulted in disciplinary procedures, which could be a barrier to incident reporting.

"14% is quite a small number, and probably represents the members of staff that have been disciplined and who would therefore agree that there is a blame culture"

The respondents were asked to consider this model (Cultural web) and complete before the interview.

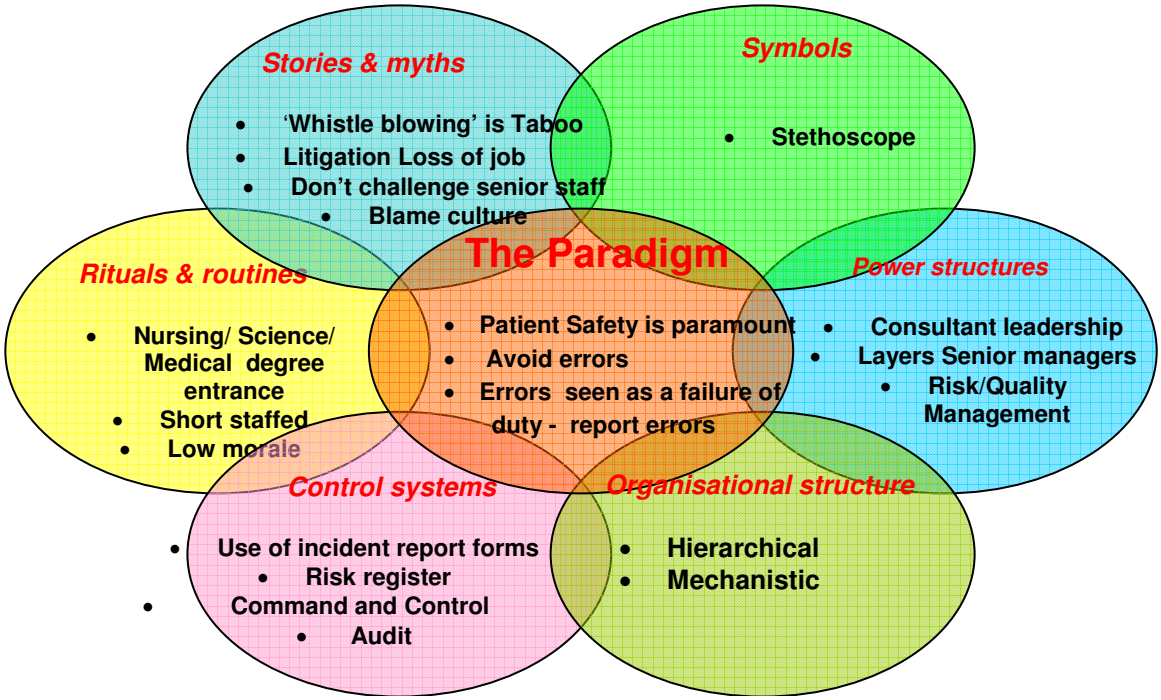


Figure 30: Cultural web showing its application to Clinical Incident Reporting at The Christie NHS Foundation Trust (Source: Author and Director of Nursing and Clinical Governance, 2009).

Commentary on the culture of incident reporting at The Christie

It was agreed by all interviewees that the cultural web model identified key cultural issues which needed to be addressed:

Symbols- doctors very rarely reported incidents; all interviewees agreed that ***"there is an expectation that nurses would complete IRF".*** It was also agreed that doctors should take more responsibility for incident reporting.

Power structure- Interviewees agreed that the Medical Director should provide leadership on the issue of incident reporting by medical staff. The NSS data (Q23e) indicates that senior management is willing to act on feedback; therefore this issue can be followed up.

Organisational structure- the hierarchical structure creates barriers to shared learning. All interviewees agreed that managers shared learning from incidents and incidents were openly discussed at the Risk committee, Quality meetings and Clinical and Research Governance Committee. However, it was agreed that "***managers should do more to cascade learning to frontline staff".*** NSS data (Q16a –Q16h) indicates that senior management is performing above the national average (HCC, 2009). Q16b indicates effective communication between senior managers and staff, but cascading learning from incident reporting would be the role of junior managers and this is not directly assessed by the survey.

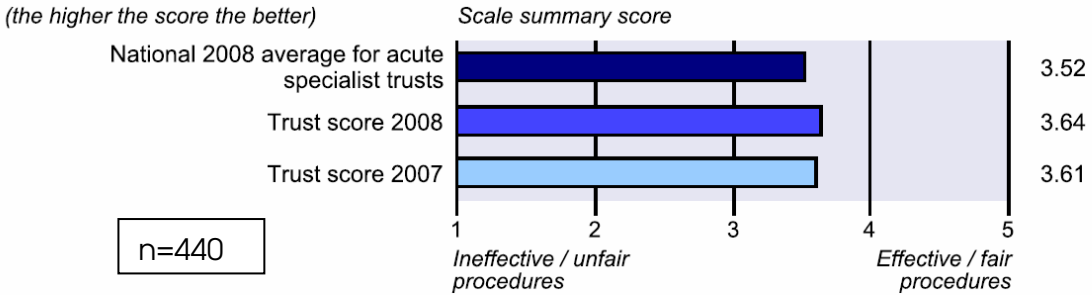
Control systems-Interviewees agreed that it was difficult to control incident reporting and that staff had a duty to report incidents.

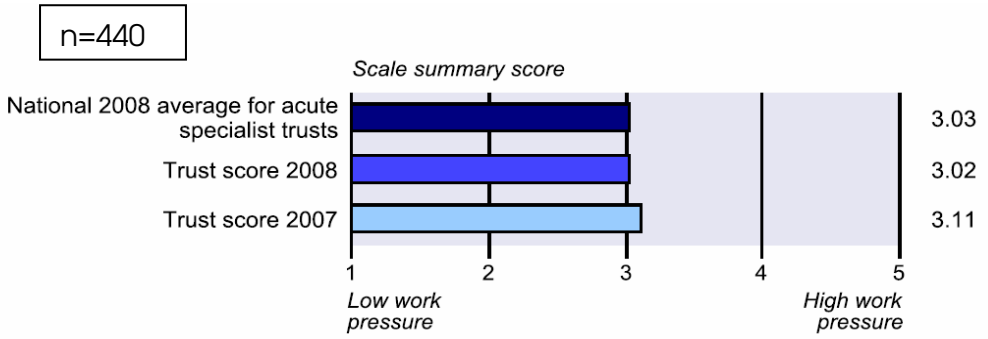
Rituals and routines- staff say they are too busy to report incidents, yet claim to always report incidents in the National staff survey (HCC, 2009). Because wards/departments are short staffed it has become part of the routine to think that they are too busy to report incidents.

Stories & myths-stories about patient death and loss of job create a barrier to incident reporting. It was agreed that these views could be dispelled by ***"educating staff and sharing the outcome incidents with grassroots staff".***

4.12 Secondary Data Result

KF 23. Fairness and effectivess of procedures for reporting errors, near misses or incidents (n=440)





n=440		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Witnessing and reporting errors, near misses and incidents			
Q25a	% witnessing errors, near misses or incidents in the last month that could have hurt patients / service users	28	26	29
Q25b	(If YES to Q25a): % saying the last time they witnessed an error, near miss or incident that could have hurt patients / service users, either they or a colleague had reported it	100	97	96

Comments

NSS data (Q25a) show that staff are witnessing incidents, there is a difference between staff saying that they report incidents and the actual level of reporting. NSS data (Q25b) could be adding to this confusion because it lacks clarity about who is actually doing the reporting. There could be an assumption that a colleague has reported an incident when in fact they have not.

n=440		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Fairness and effectiveness of procedures for reporting errors, near misses or incidents			
	% agreeing / strongly agreeing with the following statements:			
Q26b	"My Trust encourages us to report errors, near misses or incidents"	86	84	80
Q26c	"My Trust treats reports of errors, near misses or incidents confidentially"	64	64	56

Comments

NSS data (Q26b) is supported by the primary data, staff are encouraged to report incidents, the induction programme is an important starting point for this.

There has been an increase in the level of confidentiality associated with incident reporting and the trust is now in line with the national average.

n=440		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Fairness and effectiveness of procedures for reporting errors, near misses or incidents			
	% agreeing / strongly agreeing with the following statements:			
Q26d	"My Trust blames or punishes people who are involved in errors, near misses or incidents"	11	9	12

Comments

NSS data (Q26d) supports primary data findings, there is a minority of staff that feel blamed and punished following an incident.

n=440		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Whistle blowing and confidentiality			
Q18a	% saying they would know how to report concerns about negligence or wrongdoing by staff	79	82	79
Q18b	% saying there is a system to report such concerns confidentially	64	68	65

Comments

NSS data (Q18a) and (Q18b) indicate that the trust is below the national average on the issue of whistle blowing and confidentiality. This area has not improved since 2007 and requires action as it could be a barrier to reporting.

Commentary on the culture based on the NSS findings

Staff were asked questions to assess the climate and culture of incident reporting in their trust (n=440). In particular, the questions asked whether staff are aware of the procedures for reporting errors, near misses and incidents; to what extent staff feel that the trust encourages such reports, and then treats the reports fairly and confidentially; and to what extent the trust takes action to ensure that such incidents do not happen again. Possible scores range from 1 to 5, with 1 representing unfair and ineffective procedures, and 5 representing fair and effective procedures. The trust's score of 3.64 was in the highest (best) 20% of acute specialist trusts in England (HCC, 2009). NSS data supports findings of the primary data.

4.14 Learning Lessons - Self-completion Questionnaires

Q11. If you suspected an incident was a one off and unlikely to reoccur would you report it?

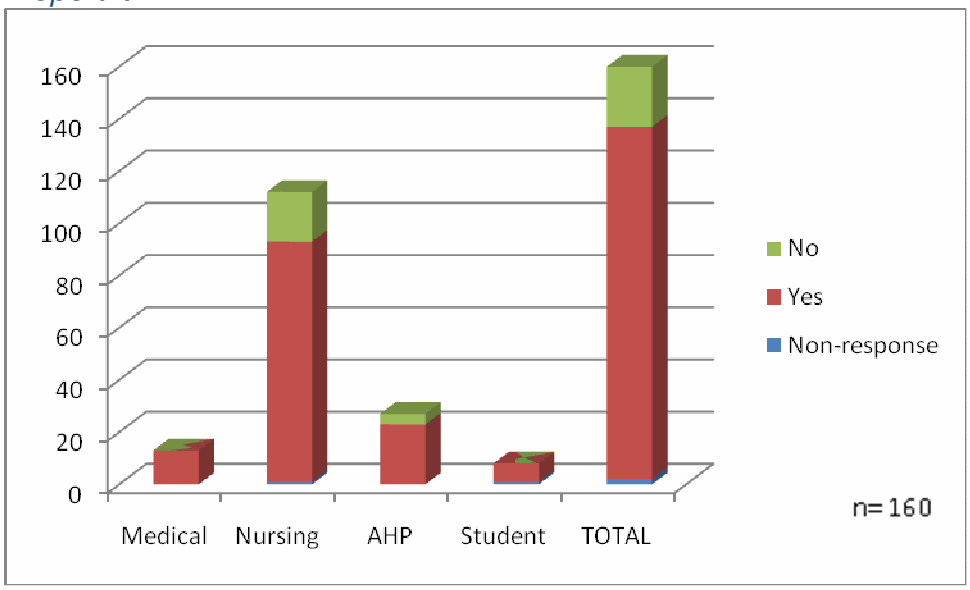


Figure 31: Reporting a one off incident

Q12. Do you feel it is important to report near misses?

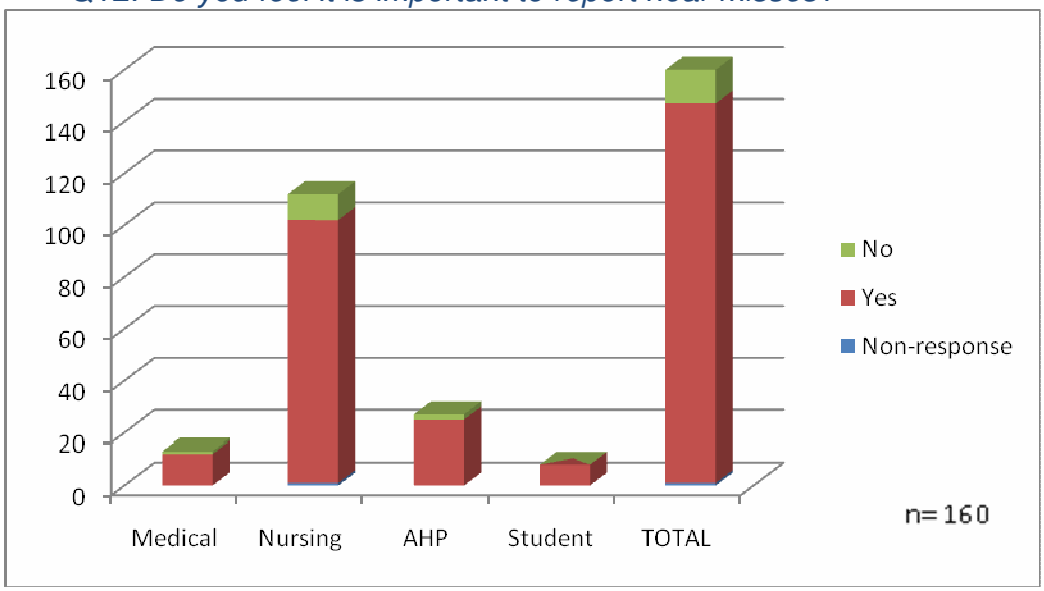


Figure 31: Reporting near misses

Commentary on reporting near misses

91% of staff completing the self-completion questionnaire stated that they report near misses.100% of doctors say that they would report an incident even if they thought it was a one-off incident, yet when the question is asked in a slightly different way referring to reporting near misses only 92% agree that they would report all near misses, this response is contradictory.

Q13. Who do you feel is responsible for completing incident report forms?

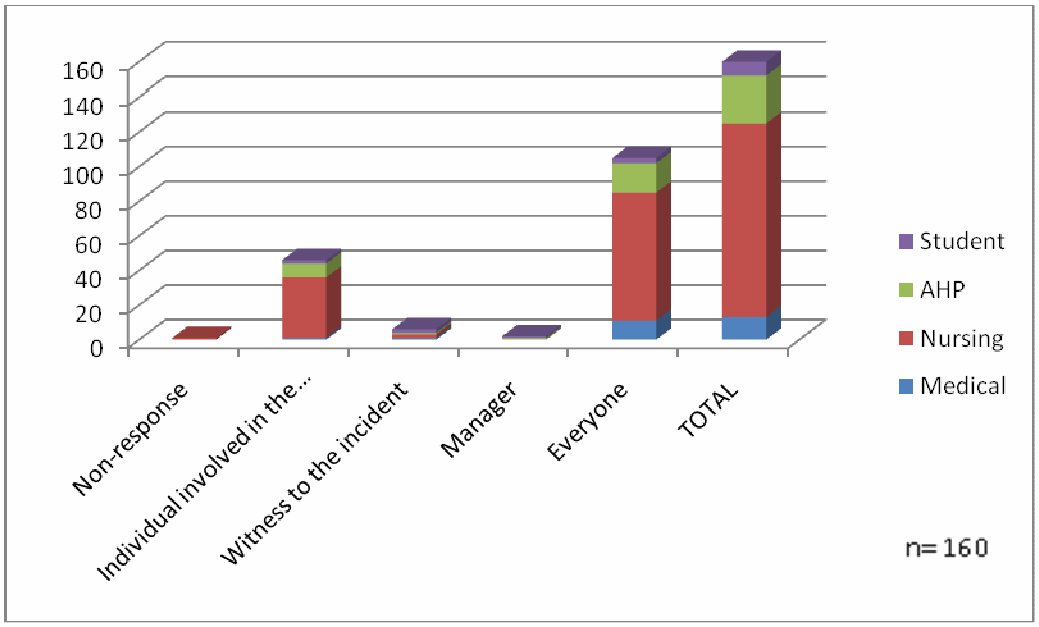


Figure 32: Who is responsible for completing IRF

Comment

The majority of staff across all professional groups felt that everyone was responsible for reporting an incident. This could result in an incident not being reported as no one takes responsibility for it. If the individual involved in an incident ensured that the IRF was completed, the reporting rate might be improved.

Q16. Do you receive regular feedback on the lessons learnt from recent incidents within your department?

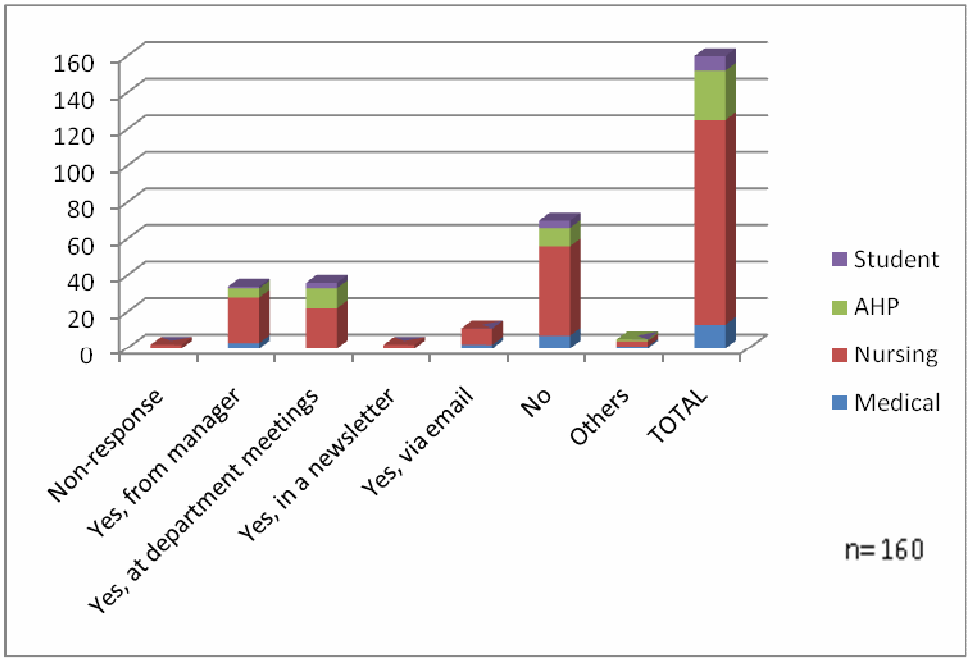


Figure 33: Incident feedback mechanisms

Comment

The majority of staff indicate that they do not get feedback this is not supported by the results of NSS data. The primary data suggests that most feedback occurs in department meetings and is delivered by managers.

Q17. Thinking about an incident you have been directly involved in/witnessed, did you receive individual feedback?

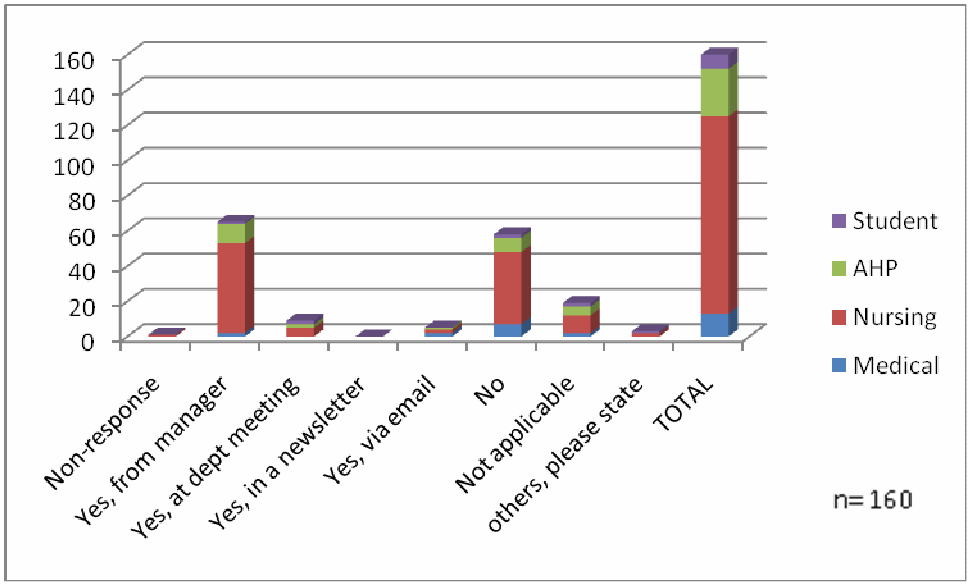


Figure 34: Staff receiving feedback following an incident

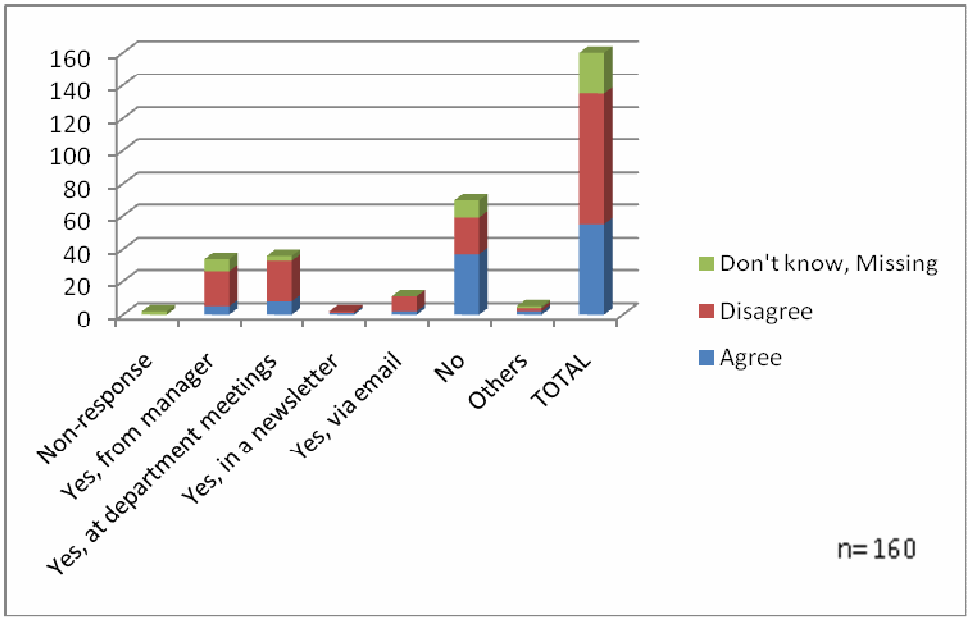


Figure 35: Further analysis of feedback data

Further analysis of the data showed that 37% of those that agreed that they never got feedback also answered no to having received feedback. Interestingly, 10% of

those that said that they never get feedback also said they received feedback from a manger or via department meetings.

Q.19. Have you shared reporting on incidents with other ward areas in order for them to learn from incidents occurring in your area?

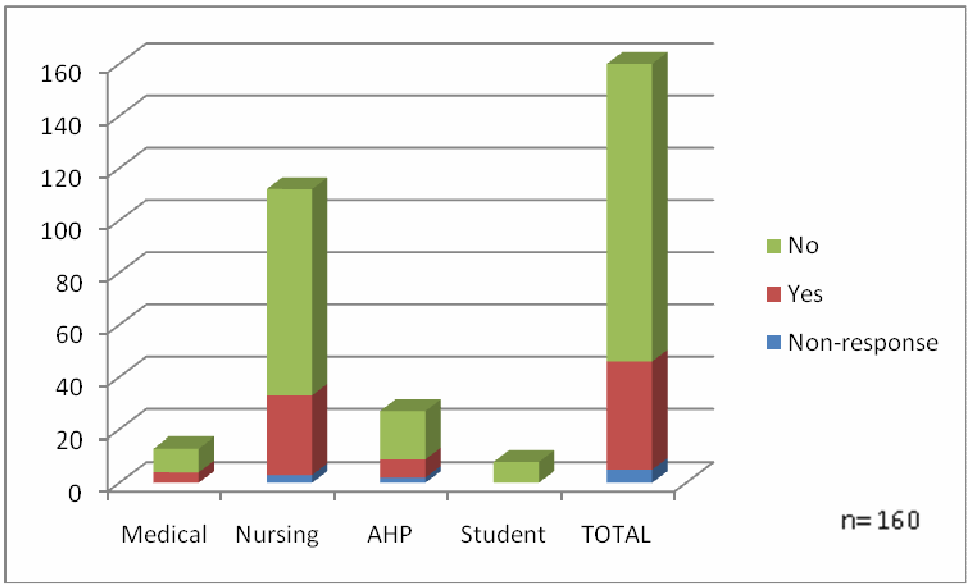


Figure 36: Sharing learning from incidents

Comment
Sharing knowledge gained from an incident generally does not occur; this is true for all professorial groups.

Q18. Did the incident result in a change in your practice?

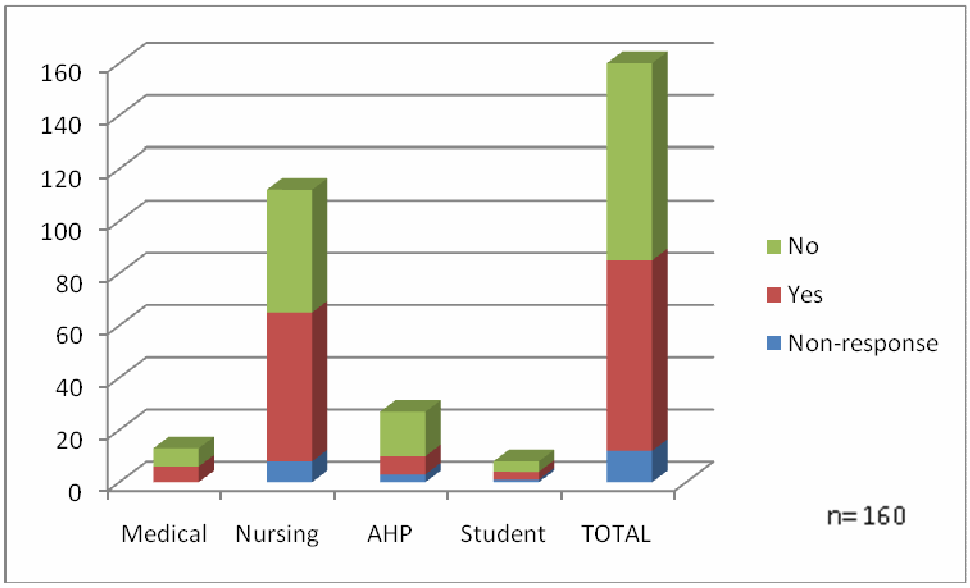


Figure 37: Change in your practice following an incident

Q20. Do you feel that reporting incidents lead to changes in practice?

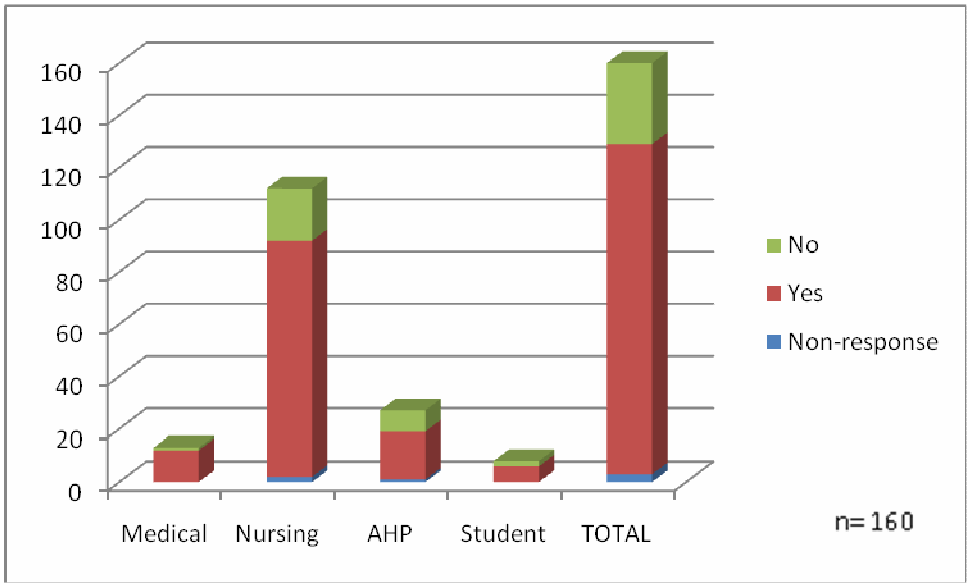


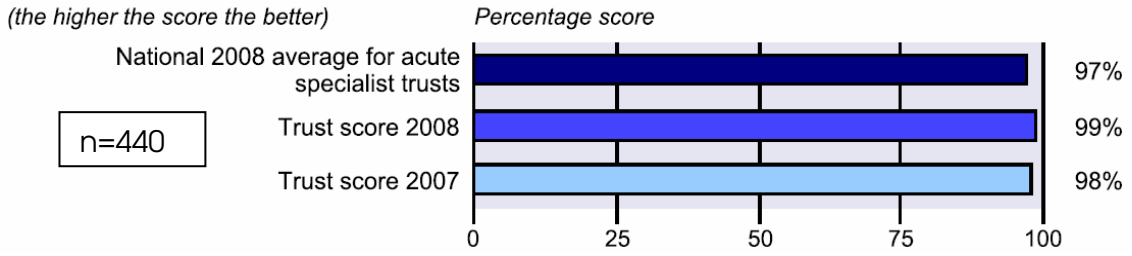
Figure 38: Reporting an incident leads to change in practice

Commentary on change following an incident

47% of respondents said that change did not occur following an incident, yet 79% of respondents agree that change should follow an incident. Interestingly, 71% of respondents also reported that no sharing of learning from incidents occurred.

4.15 Secondary Data Results

KF22. Percentage of staff reporting errors, near misses or incidents witnessed in the last month (n=440)



Comments

NSS data (KF22) indicate that staff are reporting incidents , this is not suported by NPSA (2008) data.

n=440

		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Fairness and effectiveness of procedures for reporting errors, near misses or incidents			
	% agreeing / strongly agreeing with the following statements:			
Q26e	"When errors, near misses or incidents are reported, my Trust takes action to ensure that they do not happen again"	71	63	68
Q26f	"We are informed about errors, near misses and incidents that happen in the Trust"	51	38	51
Q26g	"We are given feedback about changes made in response to reported errors, near misses and incidents"	51	43	49

n=440

		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Improving the way we work			
	% agreeing / strongly agreeing with the following statements:			
Q23e	"Senior managers act on staff feedback"	37	33	-

n=440		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Opportunities to develop potential at work			
	% agreeing / strongly agreeing with the following statements:			
Q19d	"There is strong support for training in my area of work"	47	50	-

n=440		Your Trust in 2008	Average (median) for acute specialist trusts	Your Trust in 2007
	Senior management			
	% agreeing / strongly agreeing with the following statements:			
Q16a	"Senior managers here try to involve staff in important decisions"	33	31	25
Q16b	"Communication between senior management and staff is effective"	34	30	29
Q16c	"Senior managers encourage staff to suggest new ideas for improving services"	45	38	42
Q16d	"On the whole, the different parts of the Trust communicate effectively with each other"	29	25	28

Comments

NSS data (Q26e-g) suggests that staff are happy with the learning which results from incidents, this finding is not supported by the primary data. It may be possible that some staff modify their responses according to whom asking the questions.

NSS data (Q19d) is evidence that training needs to be improved and is supported by the primary data.

NSS data (Q16a-d) indicates that senior management communication within the trust is good. This may be true in general, but evidence from the primary data does not support this with respect to incident reporting.

Commentary on NSS data

99% of staff who had witnessed such an error, near miss or incident in the last month said that they, or a colleague, had reported it. The trust's score of 99% was in the highest (best) 20% of acute specialist trusts in England (HCC, 2009). However, when the issue of near miss reporting was phrased slightly differently (Q11-primary data) 14% of respondents said they would not report a one off incident. This is a significant finding because a one off incident could be the result of near misses which are unreported.

4.16 Semi-structured Interview Results

SSI-QC1. How would you describe the culture at The Christie in relation to learning from incidents?

All managers agreed that there was a robust system in place for learning from significant untoward incidents; however, for the minor incidents learning did not always occur.

"This is an area that would benefit from further work, especially getting down to the 'grassroots' level"

SSI-QL.1 88% of respondents agrees that it's important to report near misses, however, only 78% actual report –please comment.

"There is the perception that nothing would be done about near misses and so there is no point in reporting them"

All managers agreed that *"if feedback was effective then 'grassroots' staff would be aware of corrective action taken".*

"Staff need to become more proactive about incident reporting to prevent incidents occurring and to aid learning"

SSI-QL.3 75% of respondents said they did not share incidents and so learning from incidents was limited, what can be done to reduce this barrier?

All interviewees felt that this had to be improved, suggestions included the following:

- Newsletter
- Local incident co-ordinators
- E-mail feedback on incidents

4.18 Resources- Self-completion Questionnaire Results

Q4. Are you aware that the hospital has an incident reporting system?

Staff Aware of the incident reporting system n = 160	
	%
Yes	100
No	0

Table 22: Staff aware of the hospital incident reporting system

Q5. Do you have access to incident report forms (IRFs)?

Access to the incident reporting system n = 160	
	%
Yes	95
No	3
Do not know	2

Table 23: Staff has access to the hospital incident reporting system

Commentary on the reporting system

From the results it can be seen that staff are aware of the incident reporting system and have access to IRF.

4.19 Semi-structured Interview Results

A SWOT analysis (Appendix K) of The Christie carried out for the annual report (2007) was adapted by the author and the Director of Nursing and Clinical Governance. It summarises the internal capability assessment and strategic capability which impact on the strategic development. Three key findings relating to the weakness of the incident reporting system were identified. There is limited incident reporting as shown by the NPSA report (2007), a lack of a web-based reporting system (a paper system has many disadvantages) and limited feedback mechanism.

4.20 Commentary

The SWOT indicates that resources are available within the trust and that there is a strong resource base in spite of recent financial losses. However, more resources must be targeted to the areas of importance, such as local training and shared learning.

4.21 Objective 3- main findings

To assess the range of strategic/operational choices available to reduce identified barriers to incident reporting, to examine the factors affecting implementation of strategic/operational choice, draw conclusions and make recommendations.

Q21. Which of the following do you think would increase your incident reporting?

Overall sample size (N= 160)	Nursing Staff (n=113)	Doctors (n=13)	AHP (n=27)	Student (n=7)
1.Providing feedback	90%	77%	89%	88%
2.Making reporting mandatory	53%	38%	52%	50%
3.Clarification on what constitutes an incident	71%	62%	78%	63%
4.A real time reporting system	54%	54%	52%	50%
5.A web based reporting system	45%	62%	56%	38%
6.A phone based reporting system	24%	31%	19%	13%
7.A local incident coordinator	59%	62%	56%	63%
8.Improved training	75%	69%	67%	75%
9.Anonymous reporting	53%	46%	52%	63%

Table 25: The results of those members of staff that agree with the comments

Q21. Which of the following do you think would increase your incident reporting?

Overall sample size (N= 160)	Nursing Staff (n=113)	Doctors (n=13)	AHP (n=27)	Student (n=7)
1.Providing feedback	7%	15%	7%	14%
2.Making reporting mandatory	42%	38%	37%	25%
3.Clarification on what constitutes an incident	25%	8%	19%	13%
4.A real time reporting system	35%	23%	33%	25%
5.A web based reporting system	47%	15%	30%	50%
6.A phone based reporting system	65%	46%	70%	75%
7.A local incident coordinator	35%	23%	30%	38%
8.Improved training	17%	15%	26%	13%
9.Anonymous reporting	40%	31%	41%	25%

Table 26: The results of those members of staff that disagree with the comments

4.22 Semi-Structured Interview- Results

Please rank the following measures to reduce the barriers to incident reporting

	Quality manager	Risk manager	Director of Nursing and Clinical Governance
1.Providing feedback	1	1	2
2.Making reporting mandatory	8	9	9
3.Clarification on what constitutes an incident	2	3	3
4.A real time reporting system	6	7	8
5.A web based reporting system	3	2	1
6.A phone based reporting system	7	8	6
7.A local incident coordinator	5	6	4
8.Improved training	4	4	5
9.Anonymous reporting	9	5	7

Table 27: Interviewee ranking of preventative measures to reduce barriers to incident reporting

All interviewees agreed that providing feedback was vital to reduce this barrier to incident reporting. After some discussion it was agreed with the Risk Manager, that when the web based reporting system was introduced that ***"it will be set up so that the initial reporter automatically receives feedback on an incident once it has been closed".*** All interviewees agreed that mandatory reporting was not enforceable. There was some disagreement about the need for local incident coordinators. The Quality Manager felt that ***"the trust already had enough link workers and an incident coordinator should be a manager who could track trends"***. Interviewees were in agreement that improved training was required and that its inclusion in the annual mandatory training would reduce barriers to reporting. All interviewees agreed that anonymous reporting was not acceptable to the trust, however, after some discussion it was agreed that the new web based system would ***"give the reporter the choice of reporting anonymously by providing a contact number which could be used for this purpose".***

4.23 Commentary on strategic choices

Respondents of the self-completion questionnaire ranked the following areas as important to the strategic/operational choices available to reduce identified barriers to incident reporting:

1. Providing feedback
2. Improved training
3. Clarification on what constitutes an incident

These findings compared well with the findings from the semi-structured interviews with agreement on two out of three. There was general agreement between all three interviewees ranking the top three as follows:

1. Providing feedback
2. A web based reporting system
3. Clarification on what constitutes an incident

Providing feedback is viewed as important by all groups and is a barrier that could be resolved relatively easily and without any significant financial outlay. A web based reporting system was ranked as seventh by self-completion questionnaire respondents. This was viewed as more important to senior management, possibly, because this is a route that has already been embarked upon. Clarification of what constitutes an incident was ranked three by both groups.

All interviewees agree that the major factor that would affect implementation of any strategic/ operational choices would be a ***"financial limitation".*** The trust would have to take an approach or a combination of approaches which require little or no financial input. It was suggested by the Risk Manager that "***improving feedback by the use of a 'newsletter' would be the best way to resolve this issue".*** This is because staff would see what the main incidents were and what learning occurred as a result.

After analysis of the findings the conceptual framework was revised.

4.24 Revised conceptual framework

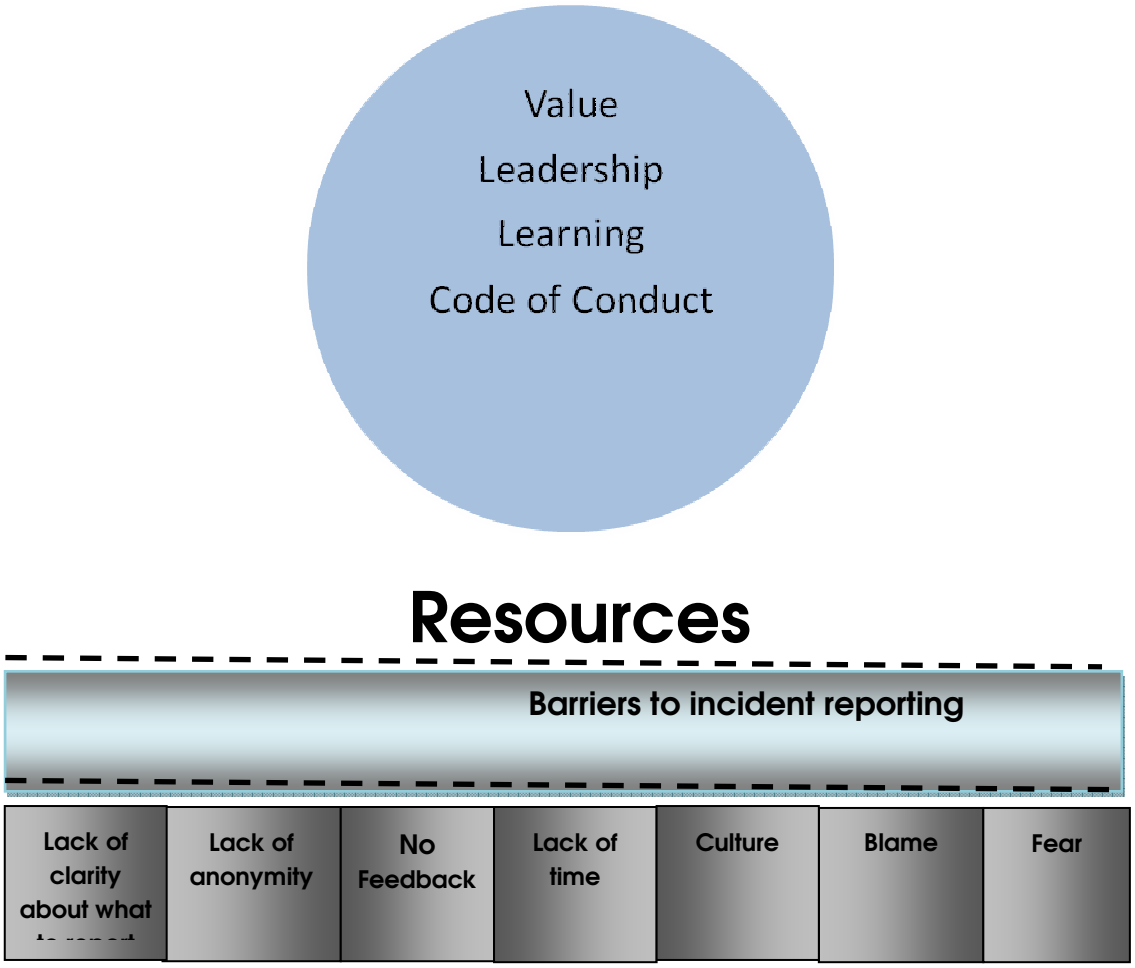


Figure 39: Revised conceptual framework (Author, 2009)

The barriers identified in the literature review were useful for the development of the questionnaire and were therefore a vital element of the conceptual framework. However, although the STEEPLE and SWOT analysis provided interesting information it was not critical to answering the research question, and can be eliminated from the conceptual framework.

This simplification of the conceptual framework would help to improve the focus on the research question. Two new elements that could be included are issues of

leadership as this would drive the overall cultural values within the organisation, and finally professional codes of conduct which would serve as a reminder to staff of their duty with respect to their duty of incident reporting (figure 39).

Chapter 5

CONCLUSIONS

This chapter will review the research findings in terms of the three objectives shown below (figure 40).

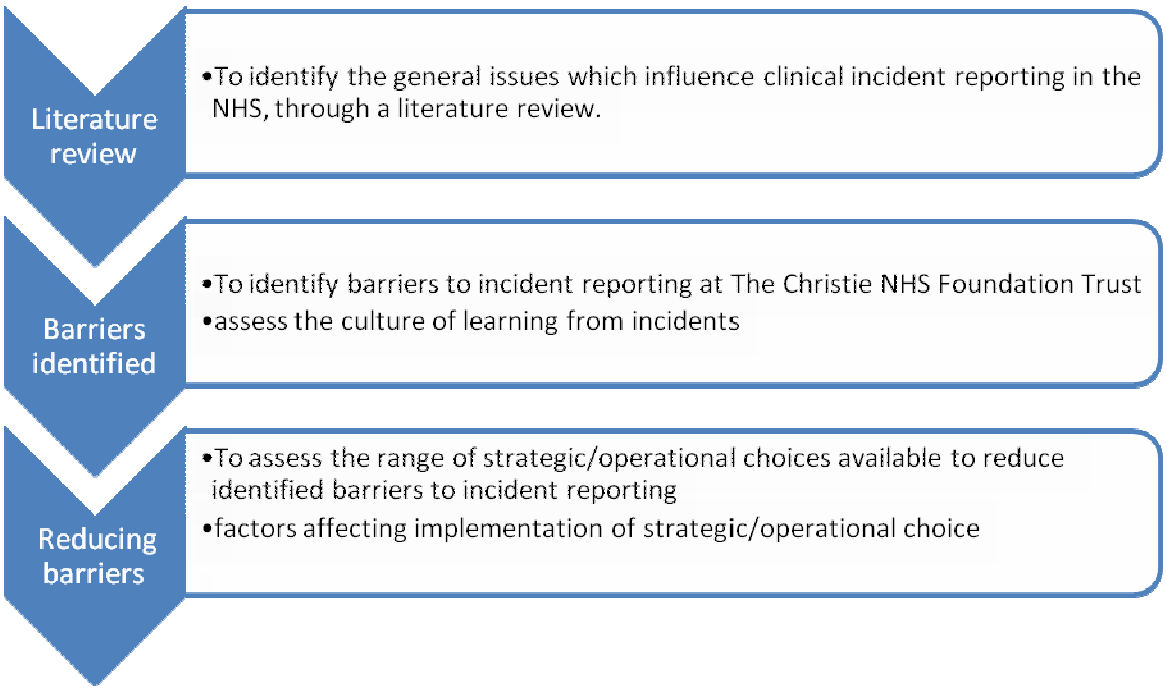


Figure 40: Research objectives

5.1 Objective 1: To identify the general issues which influence clinical incident reporting in the NHS, through a literature review.

The review of the literature did identify that one in ten patients admitted to hospital results in an adverse event, resulting in a NHS payout of £400 million a year (DH, 2000).

According to the NPSA, (2003) up to half of these incidents could have been prevented. The availability of literature on incident reporting in the NHS was

sparse. Most of the literature refers to nurses and doctors and does not refer to other professional groups.

Organisations with high levels of reporting have a strong reporting culture (Weick and Sutcliffe, 2001).The NHS position on incident reporting is that avoidable failures occur, untoward events recur and learning does not reliably lead to correction throughout the NHS. Incident reporting has been identified as a key factor in establishing an effective risk management culture (Darren, 2006).

Under-reporting is an organisational wide issue in the NHS (Firth-Cozens, 1997, O'Dowd, 2006). Several categories to barriers to incident reporting have been identified and include the following:

1. Cultural barriers to incident reporting
2. Organisational barriers to incident reporting
3. Barriers to incident reporting as a result of fear
4. Barriers to organisational learning from incidents

5.2 Objective 2: To identify any barriers to incident reporting at the Christie NHS Foundation Trust and assess the culture of learning from incidents.

The major barriers to incident reporting at The Christie have been identified and listed in order of importance as:

1. Staff are too busy to report incidents (a finding also identified by Coyle, 2005). This barrier was not accepted by senior management interviewed. All management were in agreement that this was an excuse that staff used

for not carrying out their professional duty of reporting incidents and that staff had twenty four hours in which to report an incident. However, staff perception about being too busy was supported by the secondary data from the national staff survey (HCC.2009).

2. Lack of clarity about what to report (a finding supported by Barach, 2000), this was an issue for all groups and senior management were in agreement that this was an area where they could do more.
3. Difficulty reporting a more senior member of staff. Doctors and students found this barrier to be a problem, because of the associated links to career development that a senior member of staff might hold.
4. Never getting any feedback on action taken; was found to be a barrier for 'frontline' staff. The Governance team were good at feeding back findings from investigations to divisional management. Divisional Management were found to be good at feeding back to junior managers on serious untoward incidents (SUI), but did not always ensure that findings were cascaded down to the 'frontline' staff.
5. Form takes too long to complete. Senior management agreed that the form could be reviewed and shorten slightly and they were keen to stress that there were some sections which would remain mandatory because details were required in order to carry out meaningful investigations.

The culture of incident reporting at The Christie has improved over the last few years; nonetheless, there is still room for improvement. Management has

successfully established a ‘fair blame’ culture at The Christie NHS Foundation Trust, which has supported the reporting culture within the trust.

The associated culture of learning from incidents is lacking for a number of reasons:

1. The main focus of learning appears to be associated with SUI. There are systems in place for full investigations; however any learning is not always disseminated beyond the management level.
2. There is little evidence of sharing learning from incidents beyond the areas in which the incident occurred.
3. The person reporting the incident initially often does not receive any feedback on the outcome of the incident investigation and therefore considers the process to be pointless.
4. 47% of respondents said that change did not occur following an incident, which allows reoccurrence of system incidents to take place.

5.3 Objective 3: To assess the range of strategic/operational choices available to reduce identified barriers to incident reporting, to examine the factors affecting implementation of strategic/operational choice, draw conclusions and make recommendations.

‘Frontline’ staff would like to see the following operational changes (listed in order of importance) made to reduce the barriers to incident reporting:

1. The provision of clear feedback following the investigation of an incident.

2. The clarification on what constitutes an incident
3. Improved training related to incident reporting

There was some disagreement amongst senior management as to the first issue that needed to be addressed, but overall the following were viewed to be most important:

1. The provision of clear feedback following the investigation of an incident.
2. A web based reporting system
3. The clarification on what constitutes an incident

The organisational changes required to reduce the barriers to incident reporting suggested by 'frontline' staff would not require any set up cost. Number 1 above could be provided by management within their current role. Number 2 could be provided by the governance team. Number 3 would require a significant amount of time to be invested initially to set up training programmes and workshops.

Management listed the changes as stated above, however, there would need to be a significant financial input to cover the purchase and associated training of a web based incident reporting system. The trust is already committed to this and the web based system should be implemented by May 2009.

5.4 Summary

The research into barriers to incident reporting at The Christie has produced evidence to support the view that there are barriers to incident reporting within the trust. Although the results are only applicable to The Christie NHS Foundation

Trust, there is evidence that these findings are valid because they are in line with other NHS studies which have been carried out independently. For example Evan (2006) found the lack of a clear feedback mechanism was a barrier to incident reporting. Barach (2000) found that staff were unsure about what to report and this created a barrier to incident reporting. The similarities between these findings and those reported by others serve to support the reliability and validity of the observations found in this study.

There were a number of issues that were identified as during the course of the study that would benefit from further research:

1. A low proportion of doctors participated in this study; therefore a larger study focusing solely on the attitudes of doctors would give a better understanding of the view of doctors in relation to incident reporting.
2. A study of culture within the medical profession would give an insight into the reasons why doctors are low reporters of incidents.
3. A study that focuses specifically on the AHP's would give a clearer indication into their views and could validate these findings as the literature is sparse in this area.
4. If the perception of staff about their workload were found to be correct. A study to look at the job design from the perceptive of the employee as well as managers would help to resolve this issue and manage expectations.

5.5 Study Limitations

- The overrepresentation of nurses in the research sample reflects their interest in participating and might have caused results bias by oversampling from this group of staff.

- Findings from this study should be considered in terms of limitations imposed by the design.
- Doctors in the study were not statistically represented as there were only 13 participants.

From the results it was concluded that there are a number of barriers to incident reporting at The Christie NHS Foundation. There are a number of recommendations which could be implemented to reduce the barriers.

Chapter 6

RECOMMENDATIONS AND IMPLEMENTATION PLAN

6.1 Introduction

The barriers identified can only be reduced if positive actions to eliminate them are undertaken. Below is a list of changes required in order to facilitate this.

6.2 Changes required

- Table 28 highlights the barriers to incident reporting and shows the recommended action plan 2009-2010.
- Cultural and learning barriers to incident reporting and recommended action plan are shown in table 29.
- Strategic /operational choices to reduce barriers to incident reporting and recommended action plan are illustrated in table 30.

6.3 Summary

Priority should be given to reducing the length of the IRF and providing clear polices and guidelines about what constitutes a reportable incident. It is important that staff understand what to report, before the introduction of the web based reporting system. Otherwise the Trust will have spent a lot of money without having the associated benefits. The overall cost will vary depending on the band of manager responsible for each task; total cost should be approximately £144,000 (first year). Feeding back to staff is important and the web based system will be helpful in improving this.

Barriers to incident reporting – Recommended action plan 2009-2010					
Barriers identified	**Trust Action**	**Lead**	**Timescale**	**Cost**	**Performance Targets**
1.Staff are too busy to report incidents	To review job design and assess workload in patient safety critical areas Link to appraisal Ensure clarity of roles at individual and team meetings	Human Resource Manager/Operational Managers General/Division Managers	June 2010	The cost of management time will vary depending on their band.	An increase in the number of incidents reported, in line with NPSA targets.
2.Lack of clarity about what to report	Raise awareness of incident reporting and provide clear guidelines on what constitutes a reportable incident defined by location/department Development of intranet space	Risk Manager and Quality Manager IT /Communications department	June 2009 (To be completed before the introduction of the web-based incident reporting system.	Four weeks band 7/8a time working on this project cost £4,500 IT department 3hours work band 7 cost £75	Cross check that incident description fit into the categories outlined in guidelines issued.
3.Difficulty reporting a more senior member of staff	Introduction of a confidential helpline linked to the Governance team.	Risk Manager	June 2009	£180 dedicated phone and phone line. Incident coordinator to investigate - Management time	Numbers of calls logged and follow up action.
4.Never get any feedback on action taken	Improve communication process across the Trust. Assess methods to ensure that all audiences are captured. General/Divisional mangers to improve communication within divisions.	General/Division Managers	December 2009	The cost of management time will vary depending on their band.	Check the number of feedback notices match the number of incidents closed.
5.Form takes too long to complete	Review IRF and remove sections which are no longer required Ensure that all sections of the web base system are absolutely necessary to commence an investigation.	Governance Team	May 2009	The cost of management time will vary depending on their band.	Audit this after the IRF has been modified.

Table 28: **Barriers to incident reporting – Recommended action plan 2009-2010 (source: Author, 2009)**

Cultural and learning barriers to incident reporting – Recommended action plan 2009					
Barriers identified	**Trust Action**	**Lead**	**Timescale**	**Cost**	**Performance Targets**
The culture of incident reporting at The Christie has improved over the last few years; none the less, there is still room for improvement.	Continue to promote the 'fair' blame culture. Managers to ensure staff that have been disciplined understand why they have been disciplined.	General/Divisional managers	Ongoing	The cost of management time will vary depending on their band.	Audit
Learning is not always disseminated beyond the management level.	General/Divisional mangers to improve communication within divisions. Ensure that managers cascade learning from incidents to the appropriate staff groups	General/Divisional managers	October 2009	The cost of management time will vary depending on their band.	Audit
There is little evidence of sharing learning from incidents beyond the areas in which the incident occurred.	Improve communication links across the Trust between all divisions Reinstate the monthly newsletter. Provide intranet alert updates. Utilise team briefs and staff meetings to communicate learning.	Quality manager	June 2009 – September 2009 (staged approach newsletter and intranet updates followed by	The cost of management time will vary depending on their band.	Audit
The person reporting the incident initially often does not receive any feedback on the outcome of the incident investigation and therefore considers the process to be pointless.	Feedback mechanism that links the original reporter to the incident to ensure that they receive a copy of the report once the incident is closed.	Governance Team IT Department	May 2009	The cost of management time will vary depending on their band.	Audit
47% of respondents said that change did not occur following an incident, which allows incidents to reoccur.	Communicate changes that result from incidents via newsletters, intranet and team brief.	Governance Team IT Department	July 2009	The cost of management time will vary depending on their band.	Audit

Table 29: **Cultural and learning barriers to incident reporting – Recommended action plan 2009- (source: Author, 2009)**

Strategic /operational choices to reduce barriers to incident reporting -Action plan 2009					
Barriers identified	**Trust Action**	**Lead**	**Timescale**	**Cost**	**Performance Targets**
The provision of clear feedback following the investigation of an incident.	Standardise approach and documentation for root cause analysis (RCA). Set up e-mail feedback links directly to every member of staff who initiates an incident investigation. Ensure managers cascade the outcome of the investigations to staff.	Governance Team IT Department General / Divisional Managers	May 2009 (set up during the installation of the web based system)	The cost of management time will vary depending on their band.	Audit
The clarification on what constitutes an incident	Raise awareness of incident reporting and provide clear guidelines on what constitutes a reportable incident defined by location/department Development of intranet space	Risk Manager and Quality Manager IT /Communications department	July 2009	Four weeks band 7/8a time working on this project cost £4,500 IT department 3hours work band 7 cost £75	Cross check that incident description fit into the categories outlined in guidelines issued.
Improved training related to incident reporting	Develop an incident reporting training package Include incident reporting on the mandatory training programme Identify staff training needs Arrange necessary training Raise awareness of the incident reporting process Develop an e-learning incident reporting training package	General / Divisional Managers Governance team L&D (learning and development) Team Service leads and Clinical Directors	September 2009	The cost of management time will vary depending on their band.	Monitor via PDP (personal development plan) Monitor monthly via Performance review.
A web based reporting system	Introduce a web based incident reporting system	Risk Manager IT department L&D	May 2009	£80,000 plus £4,000 annually for maintenance (Funding already approved, no business case required)	Installation completed by 30/05/09.

Table 30: **Strategic /operational choices to reduce barriers to incident reporting – Recommended action plan 2009- (source: Author, 2009)**

Appendix A

The types of incidents that are reported by The Christie NHS Foundation Trust

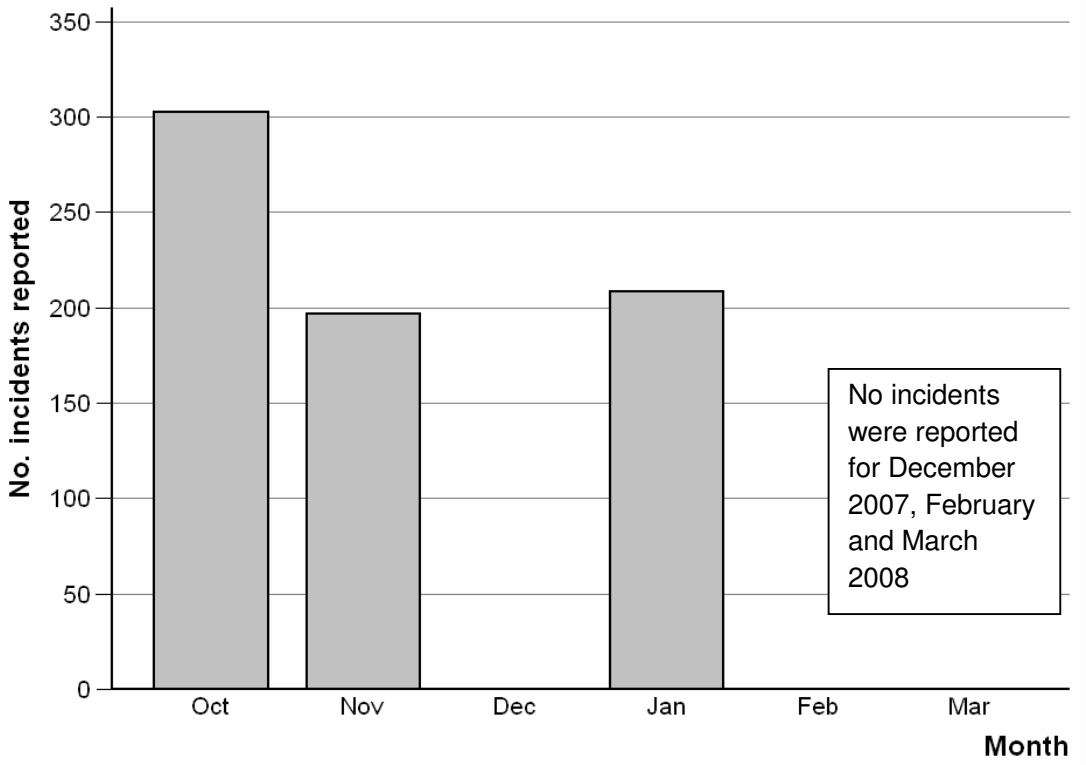
Incident type	Incidents across cluster	% incidents across cluster	Incidents from your organisation	% incidents from your organisation
Access, admission, transfer, discharge (including missing patient)	441	5.3%	8	0.7%
Clinical assessment (including diagnosis, scans, tests, assessments)	1,104	13.2%	70	6.5%
Consent, communication, confidentiality	510	6.1%	76	7.1%
Disruptive, aggressive behaviour	29	0.3%	0	0.0%
Documentation (including records, identification)	566	6.8%	30	2.8%
Implementation of care and ongoing monitoring / review	205	2.4%	17	1.6%
Infection Control Incident	132	1.6%	2	0.2%
Infrastructure (including staffing, facilities, environment)	538	6.4%	42	3.9%
Medical device / equipment	533	6.4%	44	4.1%
Medication	1,712	20.4%	561	52.4%
Patient abuse (by staff / third party)	10	0.1%	0	0.0%
Patient accident	1,173	14.0%	204	19.0%
Self-harming behaviour	20	0.2%	0	0.0%
Treatment, procedure	1,106	13.2%	15	1.4%
Other	305	3.6%	2	0.2%
Total	8,384	100.0%	1,071	100.0%

(Source: National Patient Safety Agency Report October 2007 to March 2008)

Appendix B

The number of incidents submitted to the NRLS by month

from The Christie NHS Foundation Trust



Source: NRLS report during the period 1 October 2007 to 31 March 2008

Appendix C

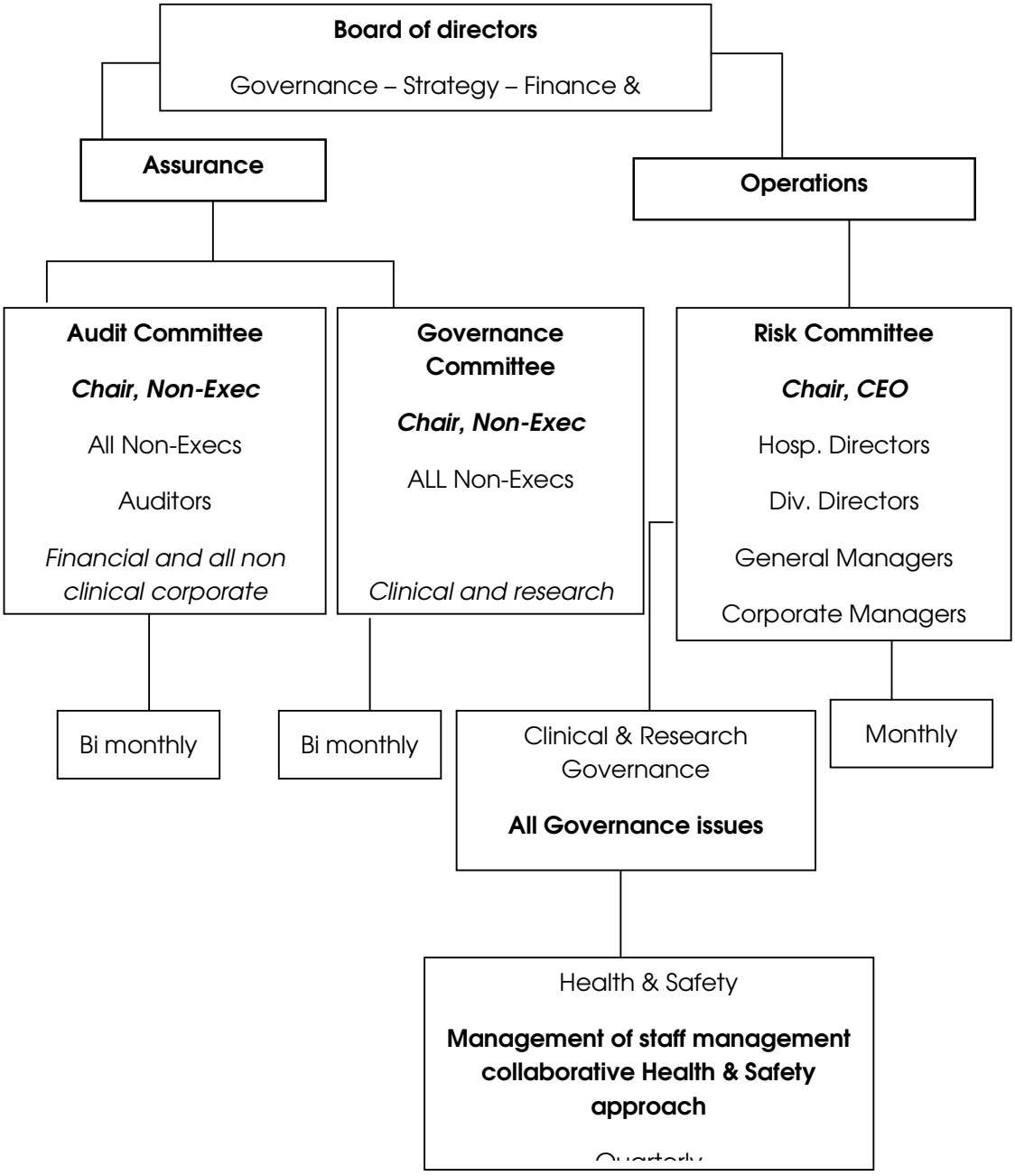
Summary of the number and rate of incidents reported including late submissions

From your organisation	Incidents occurring (1Oct2007 - 31Mar2008)	1,071
	Incidents reported (1Oct2007 - 31Mar2008)	709
	Admissions*	11,670
Across your cluster	Minimum number of reports	0
	Lower quartile	74
	Median	313
	Upper quartile	495
	Maximum	1,365
	Total number of reports	8,384

(Source: National Patient Safety Agency Report October 2007 to March 2008)

Appendix D

Risk Management Committee Structure and Internal Reporting Arrangements



(Source: The Christie Risk Strategy policy, 2008)

Appendix E

The Christie NHS Foundation Trust Balance sheet, 2007-2008

£ million	06/07 actual	07/08 actual	variance
Total income	131.5	145.6	15.2
Total expenditure	(118.5)	(129.1)	(11.6)
EBITDA	13.0	16.5	3.5
Loss on Disposal	(0.1)	(0.2)	(0.1)
Depreciation	(5.9)	(7.3)	(1.2)
Dividend	(3.3)	(3.8)	(0.5)
Interest	0.1	1.0	0.9
I&E (before exceptionals)	3.7	6.2	2.6
Exceptional Items	0	(0.9)	(1.1)
Net I&E	3.7	5.3	1.5

(Source: The Christie NHS Foundation Trust annual report, 2008)

Appendix F

Models used in the development of the Conceptual Framework

Models	Objective addressed by the model	Method of data collection	Questions which help to answer the objective	Reasons for inclusion	Critique
EVR	**1, 2and3**	Questionnaire Literature Review			
E	**1**	Literature Review SSI	STEEPLE analysis	Overview of external drivers	Produces a vast amount of data
V	**2**	Questionnaire	Question 10 parts, 7,10,13,14. Question 14 Question 15 Question 22	To assess the overall value of the organisation based on the cultural values and attitudes towards learning from incidents.	
R	**2 and 3**	Questionnaire SSI	Question 4 Question 5 Question 6 Question 8 Question 10 part 1, 2, 9, 11, 12 and 15		
Cultural web	**1 and 2**	Questionnaire	Question 14 Question 15 Question 22	Overview of cultural issues which create a barrier to incident reporting and prevents learning	Difficult to analysis objectively
Senge's 5th Discipline	**2**	Questionnaire SSI	System thinking Question 11, 12 and 19 Personal Mastery Question 13 and 19 Team Learning Question 16 and 17 Plans to achieve a shared vision	To help develop learning from incidents	Mental models are personal deep-seated views which are difficult to analyse, there is an assumption that people are willing to share very personal views.

(Source: Author, 2009)

Appendix G

I am currently in the final year of my Masters in Business Administration at Bolton Business School, University of Bolton. For my dissertation I am conducting research into the potential barriers to clinical incident reporting. This study excludes falls as figures indicate that there is no under-reporting of falls.

Your views are crucial to my study. I would be grateful if you could answer a few straightforward questions which would help me understand the views of NHS staff with regard to this topic. The results of the survey will enable me to have a better understanding of incident reporting at the trust and will provide help for managers to improve reporting rates.

I would also like to undertake a number of interviews on a one-to-one basis. If you would like to participate in these please contact me on the number below or via e-mail. These interviews provide qualitative information as to why participants hold certain views and allow the participants to offer their views in more detail.

The questionnaires and the reported results of all the research will be completely anonymous and will remain strictly confidential; participation in the research is completely voluntary, but your assistance would be appreciated. Any information collected will only be used for its intended purpose, which is to answer the research questions relating incident reporting.

I understand that completing the questionnaire may be an inconvenience to you, but I would be grateful for your time, and I thank you in advance for completing it.

Thank you for your assistance.

Sylvia Blake

Blood Transfusion Manager

E-mail Sylvia.blake@christie.nhs.uk

Telephone: 0161-446-3316

Introduction - **Studies from across the world have shown that clinical mistakes are a major threat to the safety of patient care (WHO, 2004).**

Background- 22% of incidents and 39% of near misses are unreported (O'Dowd, 2006).

Objective - to determine if barriers to clinical incident reporting exist in this Trust.

Date 15/12/08

Please note that this questionnaire is anonymous and no reports or presentations will identify individual members of staff, their details or comments

Section 1: Demographics

1. What band are you?

Band 4 or below ☐ Band 5 ☐ Band 6 ☐ Band 7 ☐ Band 8a ☐ Other ☐

2. To which of the following staff groups do you belong?

Medical ☐ Nursing ☐ AHP ☐ Student ☐

3. How long have you worked for the Trust?

Less than 6 months ☐ 6-12 months ☐ More than 12 months ☐

Section 2: System Knowledge

4. **Are you aware that the hospital has an incident reporting system?**

Yes ☐ No ☐

5. **Do you have access to incident report forms (IRFs)?**

Yes ☐ No ☐ Do not know ☐

6. **Do you feel confident about completing an incident report form?**

Yes ☐ No ☐

7. **In your time at this Trust, have you completed an incident report form (please do NOT include falls)?**

Yes ☐ No ☐

8. **Do you know what constitutes a reportable incident?**

Yes ☐ No ☐

9. **How would you define an incident?**

Section 3: Barriers to incident reporting

10. Would any of the following prohibit you from completing an incident form?

	Agree	Disagree	Don't know
Lack of confidentiality/anonymity			
Too busy			
Fear of repercussion			
Fear of disciplinary action			
Fear of litigation			
Labelling & blame for raising concerns			
Pointless, nothing will be done about it			
Fear of career and personal reputation at stake			
Lack of clarity about what to report			
Difficulty reporting a more senior member of staff			
Never get any feedback on action taken			
Reporting interrupts the work process			
A culture of silence is the norm			
Everyone makes errors			
Form takes too long to complete			
Other, please state below			

.....

……

11. If you suspected an incident was a one off and unlikely to reoccur would you report it?

Yes ☐ No ☐

12. Do you feel it is important to report near misses?

Yes ☐ No ☐

13. Who do you feel is responsible for completing incident report forms?

Individual involved in the incident ☐ Witness to the incident ☐ Manager ☐ Everyone ☐

14. Would you feel comfortable reporting an error made by someone else?

Yes ☐ No ☐

15. Do you view whistle blowing and incident reporting as the same?

Yes ☐ No ☐

<u>Section 4: Learning Lessons</u>

16. Do you receive regular feedback on the lessons learnt from recent incidents within your department?

☐ Yes, from manager

☐ Yes, at department meetings

☐ Yes, in a newsletter

☐ Yes, via email

☐ No

☐ Other, please state…….

17. Thinking about an incident you have been directly involved in/witnessed, did you receive individual feedback?

☐ Yes, from manager

☐ Yes, at dept meeting

☐ Yes, in a newsletter

☐ Yes, via email

☐ No

☐ Not applicable

☐ Other, please state…….

18. Did this result in a change in your practice?

Yes ☐ No ☐

19. Have you shared reporting on incidents with other ward areas in order for them to learn from incidents occurring in your area?

Yes ☐ No ☐

20. Do you feel that reporting incidents lead to changes in practice?

Yes ☐ No ☐

21. Which of the following do you think would increase your incident reporting?

	Agree	Disagree
Providing feedback		
Making reporting mandatory		
Clarification on what constitutes an incident		
A real time reporting system		
A web based reporting system		
A phone based reporting system		
A local incident coordinator		
Improved training		
Anonymous reporting		
Others, please state below		

22. In your view which of the following best describes this organisation's culture?

☐ Blame culture

☐ No blame culture

☐ Fair blame culture

☐ Other, please state……

Section 5: Additional Comments

Do you have any comments relating to incident reporting which would help to improve incident reporting, improve learning and reduce the risk of harm to patients?

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Thanks for your help. Feedback from this survey will be available to all staff via the intranet in May 2009.

Appendix H

Semi Structured Interview Questions

Thank you taking the time to meet with me.

I will give a brief overview of my findings so far.

Demographic profile – Quality Manager, Risk Manager and Director of Clinical Governance

Give overview of findings from self –completed questionnaires.

210 questionnaires were issued and 160 returned- excellent response rate.

67% of respondents were between bands 4-6.

7O% of respondents were from the nursing profession

8% medics

17% AHP

5% students (nursing and AHP)

82% of respondents have worked for the trust for more than 12 months

The following response was given about Barriers to incident reporting:

Q10 part 13. Would any of the following prohibit you from completing an incident form?

Overall sample size (N= 160)	Nursing staff (n=112)	Doctors (n= 13)	AHP (n=27)	Student (n=8)
1.Lack of confidentiality/anonymity	20%	0%	19%	0%
2.Too busy	46%	23%	44%	36%
3.Fear of repercussion	16%	8%	19%	13%
4.Fear of disciplinary action	13%	8%	22%	0%
5.Fear of litigation	15%	8%	19%	0%
6.Labelling & blame for raising concerns	22%	8%	30%	13%
7.Pointless, nothing will be done about it	25%	8%	30%	0%
8.Fear of career and personal reputation at stake	13%	8%	19%	0%
9.Lack of clarity about what to report	21%	23%	30%	38%
10.Difficulty reporting a more senior member of staff	27%	38%	26%	38%
11.Never get any feedback on action taken	40%	15%	26%	13%
12.Reporting interrupts the work process	21%	15%	30%	0%
13.A culture of silence is the norm	10%	8%	11%	25%
14.Everyone makes errors	26%	15%	30%	63%
15.Form takes too long to complete	21%	15%	30%	0%

SSI- QS1. Can comment on these findings?

SSI- QS2. Confidentiality is a barrier for 20% of nurses and 19% of AHP's, how can this be addressed?

SSI- QS3. How can the issue of fear (part 4, 5, 6 and 8) be reduced in order to improve the level of incident reporting?

SSI-QS4.Some staff feel that it is pointless reporting incidents because nothing will be done, how are staff informed of the outcome of incidents and are staff involved in the introduction of change following an incident? This is important because 40% of nurses say they never get any feedback.

SSI-QS5 Apart from the induction process , which is excellent at informing staff about the reporting system (100% aware of reporting system), is there any further training available on incident reporting?- there is some lack of clarity about what should be reporting. 90% of respondents said they knew what constitutes an incident, yet less than 10% could define what meant by an incident

SSI-QS6 All staff groups especially medics find it difficult to report incidents involving a more senior member of staff, how can this be addressed?

SSI-QS7 Staff feel that they are too busy and that reporting incidents interrupts the work, can you discuss resource allocation to reduce barriers to incident reporting.

SSI-QS8 The IRF takes too long to complete, what are the plans and timescale to address this?

SSI-QS9 Are there any further comments that you would like to add to the following models: STEEPLE, SWOT and EVR models.

Culture

SSI-QC.1 How would you describe the culture at The Christie in relation to incident reporting?

SSI-QC.2 37% of respondents do not feel comfortable reporting an incident made by someone else, how might this be addressed? Most respondents feel that it was everyone's responsibility to report incidents, this could remove ownership, what do you feel?- would it be better to reduce confusion by saying it is the responsibility of the individual involved in the incident to report it?

SSI-QC.3 13% of respondents view incident reporting and whistle blowing in the same way, can you comment on this?

SSI-QC.4 How can the 10% of respondents be convinced that there is a fair blame culture here at The Christie?

Learning

SSI-QC1. How would you describe the culture at The Christie in relation to learning from incidents?

SSI-QL.1 88% of respondents agrees that it's important to report near misses, however, only 78% actual report – please comment.

SSI-QL.2 37% of respondents say they do not get feedback from incidents, how do you ensure that feedback reaches the frontline staff?

SSI-QL.3 75% of respondents said they did not share incidents and so learning from incidents was limited, what can be done to reduce this barrier?

SSI-QL.4 How do managers support learning from incidents within the trust?

SSI-QL.5 Can incident reporting be performance managed by a local agreement

Resource

SSI.QR.1 Do you feel that our paper based system creates a barrier to incident reporting?

SSI .QR.2 What plans are there to address this?

SSI. QR.3 Does it allow the capture of near misses?

Overall sample size (N= 160)	Nursing Staff (n=113)	Doctors (n=13)	AHP (n=27)	Student (n=8)
1.Providing feedback	90%	77%	89%	88%
2.Making reporting mandatory	53%	38%	52%	50%
3.Clarification on what constitutes an incident	71%	62%	78%	63%
4.A real time reporting system	54%	54%	52%	50%
5.A web based reporting system	45%	62%	56%	38%
6.A phone based reporting system	24%	31%	19%	13%
7.A local incident coordinator	59%	62%	56%	63%
8.Improved training	75%	69%	67%	75%
9.Anonymous reporting	53%	46%	52%	63%

SSI.QR.1 Please comment on the following findings

SSI.QR.2 What do you consider to be the most appropriate strategic/ operational choices that are available to the trust to reduce barriers to incident reporting?

SSI.QR.3 What are the factors that could affect the implementation of strategic/ operational choices?

Do you have any comments that you would like to add? Are there any trust documents that might useful to review with respect to incident reporting?

Thank you for your time.

.

Report No

INCIDENT REPORT FORM (IRF)

(Admin Use)

CHRISTIE HOSPITAL NHS TRUST

Appendix I

Incident Reporting Form

Use this form to record ALL accidents/incidents/hazards/near misses, to patients, staff and other persons and ANY case of known or suspected work or environment related ill health.

- The completion and signing of this form does not constitute an admission of liability of any kind. The Trust has a 'fair blame' policy, recognising that when things have gone wrong the emphasis must be on taking corrective action to improve practice rather than to apportion blame and take punitive action. Disciplinary action will only be considered in exceptional circumstances.
- Any equipment involved in the incident should be retained in safe keeping for examination.
- Incidents involving death/serious injury must be reported **immediately** to the Chief Executive and Director of Nursing and Governance or their Deputy in conjunction with the Major Incident Plan.
- **Complete ALL relevant sections of the form. Please print clearly. Record FACTS not OPINIONS. Complete a separate form for each person directly involved. (USE BLACK INK)**

A. Details of person injured/involved (if patient, attach label here)
Full Name …….. If staff member, job title/grade …….. Address

……
……

Telephone No ……
Hospital No ……

Date of Birth …… Consultant
……

Sex: Male ☐ Female ☐

Inpatient ☐ Outpatient ☐ Day Case ☐ Staff ☐
Visitor ☐ Other (specify) ☐
……

B. Description of Incident, including immediate action taken following incident (continue on a separate sheet if necessary)

No of attached sheets ……

Date of Incident …… Time …….. ☐ am ☐ pm Location ……

Name/address of any witnesses

……

……..

……

……

……

…. (attach witness statements if appropriate)

Incident reported to …… Designation

…… Date ……

Person completing IRF …….. Designation

……Date ……

Signature

……

C. Did the person receive any attention? (e.g. treatment, advice, counselling, etc)

If accident, this section MUST be completed by OHD, A&E or doctor on site

None ☐ First Aid ☐ Occ.Health ☐ A&E ☐

Advised to see own GP ☐ Other (specify below)

Details:

Treatment given by:

Occupation:

(print name)

Signature:

D. Details of any Medication involved in incident

Name of Drug: …… Route of Entry: ……Dose ……

Type of Drug: …… Research Trial: Yes ☐ No ☐

E. Details of any equipment involved in incident (keep supporting evidence)

Type of equipment ……

Manufacturer ……

Sent for repair? Yes ☐ No ☐

Model ……

Retained for inspection? Yes ☐ No ☐

Serial No……

Present location of equipment …… Batch/Lot Number ……

F. Security incident/loss/damage/ex-gratia claims

Head of Security informed? Yes ☐ No ☐

Police contacted? Yes ☐ No ☐

Crime Ref No: ……

Detail loss/damage

……

……..

……

……..

Is an ex-gratia claim required? Yes ☐ No ☐

Receipts/proof of repair or replacement provided? Yes ☐ No ☐

Estimated value £ ……

FOLLOWING SECTIONS G – J MUST BE COMPLETED BY MANAGER WITHIN 48 HOURS OF ACCIDENT/INCIDENT OCCURRING AND FORM SENT TO RISK MANAGEMENT TEAM WITHOUT DELAY

G. Outline any remedial or other action taken following the incident to remove the hazard or prevent the incident occurring again

(give brief details)

Was a risk assessment in place before the incident? Yes ☐ No ☐ If yes, has this assessment been reviewed? Yes ☐ No ☐

H. If a member of staff, will he/she be absent from duties? (if appropriate)

No ☐ Yes ☐ → Normal hours expected to work on day of incident ……

→ Actual hours worked on day of incident ……..

Will they be absent for more than 3 days as a result of the incident?

No ☐ Not yet known ☐ Yes ☐ →
First day of absence ……..

→ Date of return to work (if known) ……..

I. Particulars of any injury or ill Health sustained by person identified in Section A (if appropriate)

Abrasion/graze ☐ Bruise/swelling ☐ Burn/scald ☐

Fracture ☐ Laceration/cut ☐ Exposure ☐ Needlestick ☐ Sprain/strain ☐ Other (specify) …… Part(s) of the body affected (specify) ……
J. Identify the priority of incident by circling the relevant one *(refer to Adverse Incident/Near–miss Reporting Policy)*
5-major event* **4**-moderate event* **3**-minor event (minor injury incurred) **2**-minor event (no injury incurred **1**-near miss * If necessary apply Major Incident Policy

Manager's name: …… Signature : …… Date: ……

FOR ADMINISTRATION USE

Date IRF received:……..

Entered on DATIX by: ……..

Type of Incident:……

If applicable type of loss or damage to property:

Item(s) lost or damaged:

Insurance claim initiated ? Yes ☐ No ☐

Updated records?

Ex-gratia payment authorised? Yes ☐ No ☐

Value £ ……..

Signature of Director of Finance ……. Date ……

Chq req. no:

Signed …… Date……

REPORTED TO:

HSE

☐

Infection Control

☐

MHRA

☐

Moving & Handling Co-ordinator ☐

NPSA ☐

Strategic HA ☐

Other (specify) .....

RIDDOR reportable? YES ☐ NO ☐ Form F2508 ☐ or Form F2508A ☐

Accident ☐

Disease ☐

Dangerous Occurrence ☐

Ref no. allocated by reporting body ..... Date reported .....

ROOT CAUSES

CODE	DESCRIPTION	CODE	DESCRIPTION
1.1	Diagnosis compromised by unavailability of record/results	4.5	APPRAISAL process
1.2	Adverse result or diagnostic image available but not acted on	4.6	DISCIPLINARY process
1.3	Diagnosis did not account for ALL the known symptoms	5.1	No person took adequate overall responsibility for care
1.4	Diagnosis or assessment inaccurate due to clinician error	5.2	Clinician did not seek supervision when indicated/required
1.5	Patient had latent condition not normally diagnosed by assessment	5.3	Supervision sought but not available
2.1	Inadequate arrangements were made for known higher-risk patient	5.4	Fault with the system of communication with other teams/agencies
2.2	Staff of grade appropriate for level of risk were not available	5.5	System of referral to another service/specialty/team member
2.3	Staff undertook work outside their grade/expertise/experience	5.6	Other team factors (please specify)
2.4	Clinician was a known risk of performance below level for grade	6.1	Unavailability or failure of any facility or equipment
3.1	No relevant guideline in force	6.2	Unmet training need
3.2	Guideline in force but not available	6.3	Care compromised by unavailability of staff

3.3 Guideline available but not followed

3.4 Guideline followed was incorrect or inadequate

4.1 ENGAGEMENT process for locum/temporary/bank staff

4.2 RECRUITMENT process for permanent staff

4.3 INDUCTION process

4.4 SUPERVISION or mentoring process

6.4 Workload exceeds capacity of planned staffing levels

6.5 Fault with the process for control of dangerous drugs/substances

6.6 Defect in premises or layout

6.7 Fault with the process for identifying patients

6.8 Other work environment or resource factors (please specify)

FOR SENIOR MANAGER USE

(Investigation to be undertaken and concluded within 1 month of the date of the accident / incident)

Sent to: ……..(Senior Manager)
Date: ……..

To be returned by :……

Please clarify the following points:

Confirm priority of incident (Refer to Adverse Incident / Near-Miss Reporting Policy)

5-major event *	**4**-moderate event *	**3**-minor event (minor injury incurred)	**2**-minor event

If priority 1 or 2, then no further investigation is required unless the Senior Manager feels this is necessary.

Priority incidents 1 and 2 should be investigated further if trend analyses indicate this is required.

Priority 3, 4 and 5 incidents **must** be investigated further.

Results of Investigation :
(For assistance see section 7 of the Adverse Incident / Near Miss Reporting Policy)

A. What happened? **(please clarify details of incident if not clear on page 1)**

B. How did it happen
C. Why did it happen?
D. Recommendations/Action plan/Actions implemented (together with dates)

E. Further action proposed (consider whether a risk assessment is required)

……
……

……
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……

ROOT CAUSE(S) _____ (please select appropriate code from list on page 3) N.B. THIS MUST BE COMPLETED

Investigator's name …… *Investigator's signature*
…… *Date ……*

Appendix J

Changes made to the questionnaire

- Removal of the question which asked – in which clinical area do you work? This was changed to which of the following staff group do you belong? This allowed the same information to be gained, while ensuring that staff maintained complete anonymity.
- The question which asked – how long staff had worked for the trust was amended, reducing the number of options.
- The numbers of possible responses were reduced for question 6, from very confident, confident, not so confident and not at all confident. These were changed to a yes or no response because it would make analysis simpler.

- The question, Do you consider the Trust to be a learning organisation? was changed because it was not understood by all of the nursing staff.

- The question- In your view which of the following best describes this organisation's culture? The response open culture and closed culture was cut because of a lack of understanding of these terms.

Appendix K

The respondents were asked to consider this model (SWOT) and complete before the interview.

The Christie NHS Foundation Trust- SWOT analysis

Strengths	**Internal environment**	**Weaknesses**
• Strong Christie brand • Designated "Lead Cancer Centre" • Network of chemotherapy services • High reputation of clinical leaders • Monopoly provider of radiotherapy and chemotherapy • Nationally designated centre for complex surgery • International reputation for clinical research • Second largest hospital charity in England • Sound financial position (appendix C) • NHS Litigation Authority(NHSLA) Level III		• Not on an acute hospital site • High level of donated assets • Complexity of patient pathways, reliance on other trusts to achieve 62 day cancer waiting times target • Clinical outcome data difficult to manage so that its meaningful. • Dependent on highly specialised staff • According to NPSA limited incident reporting (8% of admissions). • Lack of a web- based reporting system (plans already made to address this).
Opportunities	**External**	**Threats**
• Strategic vision supported by		• Provider competition

national commissioners • Growing demand • Expansion of radiotherapy capacity • Network plan for surgery • Expansion of chemotherapy network provision • Public support for local "The Christie at…" services • Manchester Cancer Research Centre (MCRC) partnership • *Manchester versus Cancer* alliance	• Unconfirmed tariff • Affordability to commissioners of growing demand • Increased patient expectations • Rapid developments in drug technology • More high cost drugs • Changes in NHS R&D funding • Changing financial climate

(Source: Director of Nursing and Clinical Governance and Author, 2009)

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